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SEQUENCE LISTING

<110> diaDexus, Inc.
Macina, Roberto
Turner, Leah
Sun, Yongming

<120> Compositions, Splice Variants and Methods Relating to Breast
Specific Genes and Proteins

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<150> US 60/431,145

<151> 2002-12-05

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18

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21

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24

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<210> 20

<211> 1895

<212> DNA

<213> Homo sapien

<400> 20

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25

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<211> 2426

<212> DNA

<213> Homo sapien

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 <212> DNA
 <213> Homo sapien

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<211> 2200
<212> DNA

<213> Homo sapien

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30

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 <213> Homo sapien

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 <211> 1156
 <212> DNA
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31

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<211> 933
<212> DNA
<213> Homo sapien

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 <212> DNA
 <213> Homo sapien

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tacctactgc	ttgcggcctg	ccagcgggag	gaggggggag	gaaagaagaa	agggggcg	660
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ggaagcccg	aaacaggtg	aggtcttcag	acagaatctt	ttccaggagg	taagtctctg	840
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gcctccaagg	agactcatgt	aatggattac	cgggccttgg	tgcattgagc	agatgaggca	1860
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<210> 29
 <211> 933
 <212> DNA
 <213> Homo sapien

<400> 29
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 cggggaagcc cgcaaacagg tggaggtctt caggcagaat cttttccagg gctgaggaat 180
 tcctctacag attcttgcca cagaaaatca tatacctgaa tcagctcttg caagaggact 240
 ccctcaatgt ggctgacttg acttccctcc gggccccact ggacatcccc atcccagacc 300
 ctccacccaa ggatgatgag atggaaacag ataagcagga gaagaaagaa gtccctaagt 360
 gtggatttct ccctgggaat gagaaagtcc tgtccctgct tgccctgggt aagccagaag 420
 tctggactct caaagagaaa tgcattctgg tgattacatg gatccaacac ctgatcccca 480
 agattgaaga tggaaatgat tttggggtag caatccagga gaagggtgctg gagagggtga 540
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<210> 30
 <211> 1100
 <212> DNA
 <213> Homo sapien

<400> 30
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 cggggaagcc cgcaaacagg tggaggtctt caggcagaat cttttccagg gctgaggaat 180
 tcctctacag attcttgcca cagaaaatca tatacctgaa tcagctcttg caagaggact 240
 ccctcaatgt ggctgacttg acttccctcc gggccccact ggacatcccc atcccagacc 300
 ctccacccaa ggatgatgag atggaaacag ataagcagga gaagaaagaa gtccctaagt 360
 gtggatttct ccctgggaat gagaaagtcc tgtccctgct tgccctgggt aagccagaag 420

35

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tctggactct caaagagaaa tgcattctgg tgattacatg gatccaacac ctgatcccca 480
agattgaaga tggaaatgat tttggggtag caatccagga gaagggtgctg gagaggggtga 540
atgccgtcaa gaccaaagtg gaagctttcc agacaaccat ttccaagtac ttctcagaac 600
gtgggggatgc tgtggccaag gcctccaagg agactcatgt aatggattac cgggccttgg 660
tgcattgagcg agatgaggca gcctatgggg agctcagggc catggtgctg gacctgaggg 720
ccttctatca acctggagaa aattgtcaac ccaaaggggtg aagaaaagcc atctatgtac 780
tgaacccggg actagaagga aaataaatga tctatatgtt gtgtggaatt cccttctggc 840
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tgtgtgtggga aggggtgggt gtcacaaaga caaagatgac ttagatgccc actgtaatct 960
tgactgtgag aaagagggga ttcaggccct ttctcatcca gtagtcaatg tgccatctcc 1020
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<210> 31
<211> 613
<212> DNA
<213> Homo sapien

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<220>
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<223> n=a, c, g or t

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<220>
<221> misc_feature
<222> (150)..(150)
<223> n=a, c, g or t

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<400> 31
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tctcaaaaaa aatttttttt tctcttctn cctgtttatc agtagttctg aatgttagat 180
attttttcca tgggggtcaaa ggtacctaag tatatgattg cgagtggaaa cataggggac 240
agaatcaggt attggcgttt ctccacgttc atttgtgtgt gaatttttaa tataaatgca 300
agatggaaag cattaatgca agcaaatgt ttcagtgaac acatttcaac agttcaactt 360
tataacaatt ataaataaac ctgttaaaat tttctggaca atgccagcat ttggattttt 420
ttaaaataag taaatttctt attgacggca actaaatggg gttttagca tttttatcac 480
acagtagatt ccatccattc actatacttt tctaactgag ttgtcctaca tacaagtaca 540

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36

tggttttaaat gttgtcagtc ttctgtgctg ttctgtgaag ttgtctatta aaatacatta 600
aactataaaa aaa 613

<210> 32
<211> 1291
<212> DNA
<213> Homo sapien

<400> 32
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tcggaggcct gggcggcggc tccgtgcgtt ttgggcccggg ggtcgctttt cgcgcgcccc 180
gcattcacgg ggtgctccgg ctggccgcgg cggatcccg tgcctccgg cccgctttgt 240
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gtccgacggg ctgctggcgg gcaacgagaa gctaaccatg cagaacctca acgaccgcct 360
ggcctcctac ctggacaagg tgcgcgccct ggaggcggcc aacggcgagc tagagggtgaa 420
gatccgcgac tgggtaccaga aagcaggggg cctgggccct cccgcgacta cagccactac 480
tacacgacca tccaggacct gcgggacaag attccttggtg ccaccattga gaactccagg 540
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acggaacagg ctctgcgcat gagcgtggag gccgacatca acggcctgcg cagggtgctg 660
gatgagctga ccctggccag gaccgacctg gagatgcaga tcgaaggcct gaaggaagag 720
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tcamcagccg gactgaagaa ttgaaccggg aggtcgctgg cacacggagc agctccagat 960
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ggagtaccag aggttcatgg acatcacgtc gcggctggaa gcaggagatt tgccgacct 1260
ctcgtagctg gtcgaggggac gggaagatca c 1291

<210> 33
<211> 937
<212> DNA
<213> Homo sapien

37

<400> 33

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tccgggggagt ggcgttggct gctagagcga tgccggggccg gagttgcgtc gccttagtcc      120
tcctggctgc cggcgtcagc tgtgccgtcg cgcagcacgc gccgccgtgg acagaggact      180
gcagaaaatc aacctatcct ccttcaggac caacgtacag aggtgcagtt ccatggtaca      240
ccataaatct tgacttacca ccctacaaaa gatggcatga attgatgctt gacaaggcac      300
cagtgcataa gggtatagtg aattctctga agaatatgat aaatacatte gtgccaagtg      360
gaaaaattat gcaggtggtg gatgaaaaat tgcctggcct acttggaac tttcctggcc      420
cttttgaaga ggaaatgaag ggtattgccg ctgttactga tataccttta ggtaaagttc      480
acttagaagc tttaaaaaaaa aaagtaatta aattctttta caagtttcca ttgaggtgtg      540
atatacatag agcacagggtg ctgtatgtct tagatataca gcacagggtgc acaggctcta      600
gatatacagc tcagtgaagc ttcagaaatg catgcatgca tgtagccatg actcagatca      660
agatacggaa gagcccagca ctccacgatg ctccatcatg cccctttgca gaaaatactg      720
cctcctccag taaacactat tctgatgtca ctatagatta gttttgcctc ttcgtgaact      780
ttgtataaat agaactgaac aatatgaact gtccctgtgtg atttcttgta tttcattatg      840
gggtggtgtgc tattgtatca acagggtatt tgggtggttt tcagatttgt gatattaaca      900
ataaaggaat tataaatatt gtagtacaaa aaaaaaa      937

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<210> 34

<211> 897

<212> DNA

<213> Homo sapien

<400> 34

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agcggggwgg gggsgtggcc tgcccccgcc ccagccggct cttctttgcc tctgctggag      60
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tcctggctgc cggcgtcagc tgtgccgtcg cgcagcacgc gccgccgtgg acagaggact      180
gcagaaaatc aacctatcct ccttcaggac caacgtacag aggtgcagtt ccatggtaca      240
ccataaatct tgacttacca ccctacaaaa gatggcatga attgatgctt gacaaggcac      300
cagtgcataa gggtatagtg aattctctga agaatatgat aaatacatte gtgccaagtg      360
gaaaaattat gcaggtggtg gatgaaaaat tgcctggcct acttggaac tttcctggcc      420
cttttgaaga ggaaatgaag ggtattgccg ctgttactga tataccttta ggtaaagttc      480
acttagaagc tttaaaaaaaa aaagtaatta aattctttta caagtttcca ttgaggtgtg      540
atatacgtgc acaggcttta gatatacagc tcagtgaagc ttcagaaatg catgcatgca      600
tgtagccatg actcagatca agatacggaa gagcccagca ctccacgatg ctccatcatg      660

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cccctttgca gaaaatactg cctcctccag taaacactat tctgatgtca ctatagatta 720
gttttgcctc ttctgaact ttgtataaat agaactgaac aatatgaact gtcctgtgtg 780
atttcttgta ttctattatg ggtggtgtgc tattgtatca acaggggtatt tgggtgggtt 840
tcagatttgt gatattaaca ataaaggaat tataaatatt gtagtacaaa aaaaaaa 897
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<210> 35
<211> 919
<212> DNA
<213> Homo sapien
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<221> misc_feature
<222> (4)..(4)
<223> n=a, c, g or t
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<220>
<221> misc_feature
<222> (72)..(72)
<223> n=a, c, g or t
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<220>
<221> misc_feature
<222> (85)..(85)
<223> n=a, c, g or t
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<220>
<221> misc_feature
<222> (117)..(117)
<223> n=a, c, g or t
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<220>
<221> misc_feature
<222> (119)..(119)
<223> n=a, c, g or t
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<220>
<221> misc_feature
<222> (127)..(127)
<223> n=a, c, g or t
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<220>
<221> misc_feature
<222> (129)..(129)
<223> n=a, c, g or t
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<220>
<221> misc_feature
<222> (132)..(132)
<223> n=a, c, g or t
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<220>
<221> misc_feature
<222> (139)..(140)
<223> n=a, c, g or t

<220>
<221> misc_feature
<222> (159)..(160)
<223> n=a, c, g or t

<220>
<221> misc_feature
<222> (169)..(169)
<223> n=a, c, g or t

<220>
<221> misc_feature
<222> (176)..(177)
<223> n=a, c, g or t

<220>
<221> misc_feature
<222> (186)..(186)
<223> n=a, c, g or t

<220>
<221> misc_feature
<222> (188)..(188)
<223> n=a, c, g or t

<220>
<221> misc_feature
<222> (205)..(205)
<223> n=a, c, g or t

<220>
<221> misc_feature
<222> (227)..(227)
<223> n=a, c, g or t

<220>
<221> misc_feature
<222> (230)..(230)
<223> n=a, c, g or t

<220>
<221> misc_feature
<222> (241)..(241)
<223> n=a, c, g or t

<220>
 <221> misc_feature
 <222> (286)..(286)
 <223> n=a, c, g or t

<220>
 <221> misc_feature
 <222> (326)..(326)
 <223> n=a, c, g or t

<220>
 <221> misc_feature
 <222> (328)..(330)
 <223> n=a, c, g or t

<220>
 <221> misc_feature
 <222> (333)..(334)
 <223> n=a, c, g or t

<220>
 <221> misc_feature
 <222> (345)..(345)
 <223> n=a, c, g or t

<220>
 <221> misc_feature
 <222> (348)..(348)
 <223> n=a, c, g or t

<400> 35
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 ggatttntnt tncttccnn tacgcatggg caaacgaann cccacaggng acctgnngct 180
 gttgcnantg gtgatattgg cagantctgg cctggaacta aaatgcntgn aaaaatggga 240
 nacatataca ggacagaata tggactgaaa gtgtggagaa taaacncaaa gcacaacata 300
 atctatgtaa atggccttgt tcctgnannn ttnnattgct tagtntanat caaagattct 360
 aaactgcctg catataagga tctcggtaaa aatctaccat tccctacata ttttcctgat 420
 ggagatgaag agggaaactgc cagaagatgt gtatgatgaa aacgtgtgtc agcccgggtgc 480
 gccttctatt acatttggcc taacatcttt ggacgtggca gaaccttaca tattctgtga 540
 gcttcgatga gccagagtga tatcataacc accagaaatc atactctcct ttcttagtca 600
 caacaaaatc acacatgtca tctttgtcaa gggcataaat atatcattca taccocccatt 660
 aaattttgtt agaaaaatta ccacattaaa tatatgagtt aagtagattg gatttgotga 720

41

aattggtggtt gggcatatta gcaaaatatt cttaatttgt ggactcgatt cttttttaac 780
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 aatctttgtg aaatagtggm ttgtggaaca gtagaaaacc actatgggga gctatagtgc 900
 aacgctatattt gggtaaaga 919

<210> 36
 <211> 1203
 <212> DNA
 <213> Homo sapien

<400> 36
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 aagtggagta cgcgcaggag gccgtcaaga agggctcgac cgcggttggg gttcgaggaa 180
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 gccgatgcaa ggatagtcac caacagggcc cgggtggagt gccagagcca ccggctgact 360
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 gaagtgggtc agtcagggtg caaaaacatt gaacttgctg tcatgaggcg agatcaatcc 720
 ctcaagattt taaatcctga agaaattgag aagtatgttg ctgaaattga caccgagaac 780
 aagyaagrat mactgaaaag aagsaayaca akaagaaagc atcatgsatg aataaaatgt 840
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 gcttcagcga ccagttttcc cctggggggc gggaggccca aggaaccccc cagggggggc 1020
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 tcttataaccg catgggtatg gcgaccgcgc ttttaccagg tccggtgacg gtgtaacctc 1140
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 ttg 1203

<210> 37
 <211> 850

42

<212> DNA
 <213> Homo sapien

<220>
 <221> misc_feature
 <222> (841)..(842)
 <223> n=a, c, g or t

<400> 37
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 gtgcttatat agagtcagtg gtaaaatattc tggcgggtcg tcggaagata cacgcgctat 180
 gaagagttcc agcagcttag cgcaggcatc gcgggaggat cactgtgagc ctcatgaggt 240
 gccagaccaa gcactaggca atgtagtgac acctcatttc tatttatattt aaaaaaaga 300
 gagagtaact acagaagaac tttaaaaata aaaataagct taccttggat tcttggctta 360
 gagtagaggt tttttttaag ttatggagga aacatttttg taaaagttaa atgaccact 420
 ttagatgctc caagaacaag catcccttcc atgtatgtct tgagaaagaa atcacagaag 480
 catttctcac caatactctt tggcttaaaa tggtcagcag aattgggcag tgggggtgac 540
 ttttcttata ttaataatat ttacatccaa tacactgaat cttcctttar aggwaagact 600
 ttaatatcta tactgtaaat atttggttya ttkggcacya cygtaagggt ggtyttcmca 660
 aagctcttat tatgaagcaa aataaaaatt ctagtttccct ggatgaattt ttggactcat 720
 tcaatcctgg taagccgccc aaaaataaaa gggccaaatt ggatattttt aaaaaccaat 780
 ttaaaataaa aatttgaagg ttttccggtc tccaaaaaac cccatccttt tagggttatt 840
 nnatccgcca 850

<210> 38
 <211> 555
 <212> DNA
 <213> Homo sapien

<220>
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 <222> (28)..(28)
 <223> n=a, c, g or t

<220>
 <221> misc_feature
 <222> (70)..(70)
 <223> n=a, c, g or t

<220>
 <221> misc_feature
 <222> (88)..(88)

<223> n=a, c, g or t

<220>

<221> misc_feature

<222> (100)..(100)

<223> n=a, c, g or t

<220>

<221> misc_feature

<222> (118)..(120)

<223> n=a, c, g or t

<220>

<221> misc_feature

<222> (127)..(127)

<223> n=a, c, g or t

<220>

<221> misc_feature

<222> (143)..(143)

<223> n=a, c, g or t

<220>

<221> misc_feature

<222> (149)..(149)

<223> n=a, c, g or t

<220>

<221> misc_feature

<222> (193)..(193)

<223> n=a, c, g or t

<220>

<221> misc_feature

<222> (268)..(268)

<223> n=a, c, g or t

<220>

<221> misc_feature

<222> (332)..(332)

<223> n=a, c, g or t

<220>

<221> misc_feature

<222> (340)..(340)

<223> n=a, c, g or t

<220>

<221> misc_feature

<222> (352)..(352)

<223> n=a, c, g or t

<400> 38
cgacccgccc gcggggggag tgcgtgangc ttccggacga ggcggactgg aacgtttctc 60
tcaagcgagn cgcacgcaca ggcgtggnc tgaacgggcn ccgcgagtcg tctttccnnn 120
agcctgnaac aagtaagggc gtngctcng agggctgcc aagtcggcgg ggcggcgggg 180
cctaaactcg gcntcaccag ccagcgtca gccaggtctc ggtgctcagc ggcggcaagc 240
gccaagggct cgcagttctg caccactngc catggatggc ggcagtgagt tctcgggatg 300
tcgaagggct tggagtcagc cttgaaggac cncaagatcn aatgacctgt gnggaatttg 360
ttgccttcat cctggctgct ggggaagcgg ggagaggggt caggagggt aatggttgc 420
ttgctgaatg tttctgggg accaatamgm gttcccatag gggcttctyc ctcaaaaagg 480
gagggtagac atggggagct tttcttacct attcaaggaa tacgtgcctt tttcttgaat 540
gctttcattt attga 555

<210> 39
<211> 635
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (33)..(33)
<223> n=a, c, g or t

<220>
<221> misc_feature
<222> (64)..(64)
<223> n=a, c, g or t

<220>
<221> misc_feature
<222> (107)..(107)
<223> n=a, c, g or t

<220>
<221> misc_feature
<222> (306)..(306)
<223> n=a, c, g or t

<400> 39
cctggtgtgg ccttgtgggg aagacgtttg agntgtggcc ggcgtgggga cctccacccg 60
ccanttgagg gagcaccaga agggccggcc caccagcacc aacccnccg ccagcayaw 120
wgcagracac tggctggagc accgggggaa gctggwggga ccaaccmcmw cggttwgccc 180
awgcsggaga aggtggcgkg gagacggtgg agagtggagc catgaccaag gacctggcgg 240

45

```

gcygcaktca cggcctcagc aatgtgaagc tgaacgagca cttcctgaac accacggact    300
tcccnacac catcaagrgc aacctggaca gagccctggg caggcagtag ggggaggcgc    360
caccatggc tgcagtggag gggccagggc tgagccggcg ggtcctcctg agcgcggcag    420
agggtgagcc tcacagcccc tttctggagg cctttctagg ggatgttttt ttataagcca    480
gatgttttta aaagcatatg tgtgtttccc ctcatgggtga cgtgaggcag gagcagtgcg    540
ttttccctca gccagtcagt atgttttgca wactgtaatt tatattgccc ttggaacaca    600
tggggccata tttagctatt aaaaagtttt tccca                                635

```

```

<210> 40
<211> 347
<212> DNA
<213> Homo sapien

```

```

<400> 40
gacatgcgaa gccaatatta ggtcatggcc gagcagaacc ggaaggatgc ttaagcctgg    60
ttccccagcc ggacttaaaa atttaaccgg gaggtcgctg gcccccgga gcagctccaa    120
attagcaggt ccgaggtttt ttaccttcgg cgcacccttc agggttttta gatttagctg    180
cagtccctac aacaatttgt ttgcctccaa ggtcctttta ggcagcaggc tttggggcct    240
ttgctgtcct ttggaggggtg ttttttgggt aaagggatgg gaaggaaggg acccttacct    300
ccggcttttt tcctgacctg ccaataaaaa tttatgggtcc caagggg                    347

```

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<210> 41
<211> 761
<212> DNA
<213> Homo sapien

```

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<400> 41
acttcaggac atatttgta cttcgtgagt aagttgggag ggctcggagc ccctgcctg    60
tgttcacatg gtgacacct tgtttgtgtc tggtgctgg gaagttctat gatagggact    120
gcggatgaga ctgtgtaaag tctctgctgg aggtcttggg ccggctcccc ccggacatca    180
agagtctact gtggccacga gtacaccatc tacaacctca agtttgcacg ccactgtgga    240
gcccggaat gctcgccatc ctgggagaag ctggcctggg ccaaggagaa gtacagctat    300
tggggagccc acagtgccat ccaccttggc agaggagttt acctacaacc cttcatgag    360
agtgagtggc cctggctcct ccggtgggcg tggtcggca ctagcctgct agcccggtgt    420
ctggcctcac gtcagggaga agacggtgca gcagcacgca ggtgagacgg acccggtgac    480
caccatgcgg gccgtgcgca gggagaagga ccagttcaag atgccccggg aytgaggccg    540
ccctgcacct tcagcggatt tggggattag gctcttttag gtaactggct ttcctgctgg    600

```

46

tccgtgcggg aaattcagtc ttgatttaac ctttaatttta cagcccttgg cttgtgttat 660
cggacattct aatgcataatt tataagagaa gtttaacaag tatttattcc catatttacg 720
gtcgcgggat cctgattgat cggatactaa atgtagcttc t 761

<210> 42
<211> 1130
<212> DNA
<213> Homo sapien

<400> 42
agcgggggga ggcggggcgagg aggcgccgcg gcgggtgtta ttgttcggct gggctcggtc 60
gggcgctgtc tccctcggct ctgcgggtgt cagttcgtcc ggcttcctca cagccctca 120
ctcccgctg crtgkctgac agcagcaygc wggctggcyg gctgtgtgct gtgcgcctgg 180
mcgtttcgag gctgagcggc accgggggtt gggcgcgga ggaggagcag cagcggggag 240
gaggagcctg tgtgccctgt gcacttgagc ggaccgcggc catggcgtag gcctatctct 300
tcaagtacat cataatcggc gacacaggtg ttggtaaata atgcttattg ctacagtta 360
cagacaagag gtttcagcca gtgcatgacc ttactattgg tgtagagttc ggtgctcgaa 420
tgataactat tgatgggaaa cagataaaac ttcagatatg ggatacggca gggcaagaat 480
cctttcgttc catcacaagg tcgtattaca gaggtgcagc aggagcttta ctagttaacg 540
atattacacg gagagataca ttcaaccact tgacaacctg gttagaagat gcccgccagc 600
attccaattc caacatggtc attatgctta ttggcaaata aaagtgattt agaactctaga 660
agagaacgta caaaaagaag aagggtgacag cttttgcacg agaacatgga ctcatcttca 720
tggaacgctc atgtaagact gcttcaatgt agaagaggct tatatcatac atgaaaaaga 780
agtatatgaa gaactacaag aaggagctat gacattatag tgggcagttg gttaaattgt 840
cataagattg gtgtacgaat gacgattgca gcataaggaa gcaagatgag aaggggggtga 900
gaaggcttgg atatggttat gatgacaggt ggcataacaa tattttgaga ccatgttgtg 960
aagagtagac gtaacaatag aatgttgata gaacgatata caggaatgta taactaagg 1020
gtgagcttaa agaaactgaa ttgtgggaaa aaaaggctgt gaacgtaagg gtatcataaa 1080
attgagatca gagagcgaag atgagctccc tcctcacgctc aatagagcat 1130

<210> 43
<211> 402
<212> DNA
<213> Homo sapien

<400> 43
gtctctatct tcctgtctcg atcacattat atcgactcca gtgtaatgcc tctactgcga 60
gaatcccagg accgactact accaagagct gcagagagac atctctgaaa tgtttatgtc 120

47

```

agatttatca acaaggggtg ttgtctgggc ctctccaatt attaagttca ggccaggatc 180
tgtggtggta caattgactc tggttttccg agaaggtacc atcaatgtcc acgacgtgga 240
gacacagttc aatcagtata aaacggatgc agcctctcga tataacctga cgatctcaga 300
cgtcagcgtg agtgatgtgc catttccttt ctctgccag tctggggctg gtgtgccagg 360
ctggggcatc gggctgttgt cgctggatc agctgggtgct gg 402

```

```

<210> 44
<211> 666
<212> DNA
<213> Homo sapien

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<220>
<221> misc_feature
<222> (640)..(640)
<223> n=a, c, g or t

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<400> 44
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agcagattgy ayggttccaa agacactttg akgacgattc ttaacaataa cgatacaaat 180
ttggccttaa gaactgtgtc tggcgytctc aagaatctag aagatgtgta aacagggtatt 240
tttttaaakc aaggaaaggc tcatttaaaa caggcaaagt ttacagaga ggatacat 300
aataaaaactg cgaggacatc aaagtgggta aatayctggd gaaatacctt attdctcaca 360
aaaagggcaa atatgragag ttgtttatca acttcgctag aaaaaaacg aacacsttgg 420
catacaaaat atttaagtga aggagaagtc taacgctgaa ctgacaatga agggaaattg 480
tttatgtgtt atgaacatcc aagtctttct tcttttttaa gttgtcaaag aagcttcac 540
aaaattagaa aggacaacag ttctgagctg taatttcgcc ttaaactttg ggacactcaa 600
tagtaggcat ttttaacttg aatataaata ttcagccagn cacatatctg cccagcccca 660
ttttct 666

```

```

<210> 45
<211> 166
<212> DNA
<213> Homo sapien

```

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<400> 45
cctaagtgga actgctcgga taagcaggtc cgaggttact gacctcgggc gcacccttca 60
ggttcttgag attgagctgc agtcacagct gagcatgaaa gctgccttgg aagacacact 120
ggcagaaaacg gaggcgcgct ttggagccca gctggcgcat atccag 166

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<210> 46
 <211> 880
 <212> DNA
 <213> Homo sapien

<220>
 <221> misc_feature
 <222> (159)..(159)
 <223> n=a, c, g or t

<220>
 <221> misc_feature
 <222> (201)..(201)
 <223> n=a, c, g or t

<400> 46
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 acgagcgccg gggagcgggc gttacgcggg gccccggatc gcttgtgggc accaatcaac 120
 ggttgccata gcagcggttg acgtcatcgt gcgtgtggnr gcccctgact gccggggcgt 180
 ggtgattcgg caggaaaccc nctgtgtctg caggacgcgg cttgtagccc tgtttgagca 240
 gcgaagatcc atgggacagg agtctcatgc ctgcgcgcgt gctwgcgcs tgccgccgcs 300
 cyagagactg ctgagcccgt ccgtccggcg ccaccacca ctccgggaca cagaacatcc 360
 agtcatggat aaaaatgagc tggttcagaa ggccaaactg gccgagcagc tgagcgatat 420
 gatgacatgg cagcctgcat gaagtctgta actgagcaag gagctgaatt atccaatgag 480
 gagaggaatc ttctctcagt tgcttataaa aatgtttag gagcccgtag gtcattcttg 540
 agggctcgtc caagtattga acaaaagacg gaagggtgctg agaaaaaaca gcagatggct 600
 cgagaatacm gagagaaaat tgagacggag ctaagagata tctgcaatga tgtactgtct 660
 cttttggaaa agttcttgat cccaatgct tcacaagcag agagcaaagt cttctatttg 720
 saamatgaaa aggagattac taccgttact tggctgaggt tgccgctggt atgacaagaa 780
 aggsatkctg atcagtacaa saagcatacc aagaagcttt tgacatcagc accacggaaa 840
 tgccaccaac acatcctatc agactgggtc tggccttaac 880

<210> 47
 <211> 885
 <212> DNA
 <213> Homo sapien

<400> 47
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 acttcaaagc cagagctggt atgccagatg gtcagttag agatatcagc ctgtctgact 120
 acaaggagaa tatgttgtgt gcttctttac cctcttgact tcagcgtttg atgtgcccc 180

cggaagtatc atcgctttca gttgataggg cagaagaatt taagaaactc aagctgccag 240
 gtgatgggtg ctctctgtgg asttctcact tctgtcatct atcatgggtc aatacacctr 300
 aygasacakg gaggactggg acccatgaac atcctttggt atcagatccg aagcgcacca 360
 ttgctcagga ttatggggtc ttaaaggctg atgaaggcat ctcgttcagg ggcctttttt 420
 atcattgatg ataaagggtg ttcttcgaca gataactgta aatgacctcc cgttggccgc 480
 tctgtggatg agactttgag actagttcag gccttcagg tcaactgaaa acatggggaa 540
 gtgtgcccag ctggctggaa acctggcagt gataccatca agcctgatgt caataagagc 600
 aaagagtatt tctctaagca gaagtgagca ctggaccatt tttctgccag gcagcattga 660
 gcagccagaa gaaactcttg tactctactc gtgcttaaac acatgatgtg gtgtgattcc 720
 agataagcct ttctacaggg gctggggatg gatagccttt cttccactat tggtaatggt 780
 ctgagctgtg ttttgggcag accaatcttc tatcagtcac agaaaacaac ctgttaattc 840
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<210> 48
 <211> 898
 <212> DNA
 <213> Homo sapien

<400> 48
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 acttcaaagc cagagctggt atgccagatg gtcagttag agatatcagc ctgtctgact 120
 acaaggagaa tatgttgtgt gcttctttac cctcttgact tcagcgtttg atgtgcccc 180
 cggaagtatc atcgctttca gttgataggg cagaagaatt taagaaactc aagctgccag 240
 gtgatgggtg ctctctgtgg asttctcact tctgtcatct atcatgggtc aatacacctr 300
 aygasacakg gaggactggg acccatgaac atcctttggt atcagatccg aagcgcacca 360
 ttgctcagga ttatggggtc ttaaaggctg atgaaggcat ctcgttcagg ggcctttttt 420
 atcattgatg ataaagggtg ttcttcgaca gataactgta aatgacctcc cgttggccgc 480
 tctgtggatg agactttgag actagttcag gccttcagg tcaactgaaa acatggggaa 540
 gtgtgcccag ctggctggaa acctggcagt gataccatca agcctgatgt ccacaagagc 600
 aaagaatatt tctccaagca gaagtgagcg catgggcktg ttttagtgcc aggctgcggt 660
 ggacagccat tagaacaaaa cctcctctgt attttttctt tccgttagtt tttcccaata 720
 cttcagattc agccgaagtg tgggtgtctta caaggcaggc ctttcctaca gggggtggag 780
 aaaccagcct ttcttcggtt ggtaagaatg gcctcagtga gcgatgtggt caggccattg 840
 gtatgtagca tgtatgaata aagcaacca ttaaactgtg gtaggtagta ataaacta 898

50

<210> 49
<211> 910
<212> DNA
<213> Homo sapien

<400> 49
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ggtcgccgtg tggccagagt gggccccgtc gtccccaaca ctctgtctcg ctacagacact 120
ctggcaggat gtctggggcc tcaccagcag gagcgcgtgc aagccgggca ggcgggccac 180
ctagaccac asccccctcg gagcaccca cccttgtgtt ygacgtagct ytctctccct 240
casctgcaa ggktccgwtg tgccatcgaa aaagacmacy ycyacytytt yctttystmt 300
tttgwyaawc mcygaagcyg gagctgytaa atttatcttg gggaaacctc agaactggtc 360
tatttggtgt cgtggaacct cttmactgct ttcaccatac acgkatmagt aatcaactgt 420
tttgtatact tgttttcagt tttcatttcg acaacaagc actgtaatta tagctattag 480
aataaaatct cttaactatt aaaaaaaaaa agggaaaaaa aaaaaaaaaa aaaaaaaaaa 540
aaaaaaaaaa aaccaaaaaa aaaaaaaaaa aaaaaaaaaa aaaacagggg ggccgcctgg 600
gccaagggga ctttagactg gggcaggcta aggcaggggg cggaaattgg ggctaactgg 660
gccaattggc ccaaaggggg gcggaataac aatcaacggg ccgggggttta aaaacgtcgg 720
gacgggaaaa acccgggggt acccaacta aatggcctgg aagaaaatcc ccttttggca 780
agtgggggaa aaagcaaaag ggcccgaacg gatggccttt ccaaaaagtg gcgcacccgg 840
aagggcaaaag ggaaatggaa ggcgtaaaaa ttgggtaaaa atccgggtaa aattttggta 900
aaacaagcca 910

<210> 50
<211> 129
<212> DNA
<213> Homo sapien

<400> 50
cgagcggcgc cagtgtgatg gatcgcccg gcaggacta ttcggccagc aacggggagc 60
ctgatgagga cgcttatgat atgaggaaag cactttccag gatactgaga agaaatccat 120
cataccatt 129

<210> 51
<211> 1073
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature

51

<222> (7)..(7)
 <223> n=a, c, g or t

<220>
 <221> misc_feature
 <222> (160)..(161)
 <223> n=a, c, g or t

<400> 51
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 aattatccca aaaacatcca gctagcacgc cgcatacgtg gagaacgtgc ttaagaatcc 120
 actatgatgg gaaacatttc attctcaaaa aaaaaaaaaa naattttctct tcttcctggt 180
 attggtagtt ctgaacgtta gatatttttt ttccatgggg tcaaaaggta cctaagtata 240
 tgattgcgag tggaaaaata ggggacagaa atcaggtatt ggagttttt ccattttcat 300
 ttgtgtgtga atttttaata taaatgcgga ggcgtaaatc tttagatgag tattcagtgt 360
 tcaacttgcg tatttaacga atcattagga ttttctcata aatamrcctg ttaaaktttt 420
 ctggacaatg ccagcatttg gawtttttta aarsaagtaa tttcttattg atggcaacta 480
 aakggtgttt gtagcatttt tatcatcacg tagattccak ccattcacta tacttttcta 540
 actgagttgt cctacatgca agtacatggt tttaatgttg tctgtcttct gtgctgttcc 600
 tgtaagtttg ctattaaaat acattaaact ataaaaaaaa aaaaaaaaaa aaaaaaaaaa 660
 attttggggg ggctggggcca cttggaaaag gtttcaaaac caattcgtgt tttggggcgc 720
 cagggggcca aggtaagggt gtatcggcca cacttgggca ataaggctgg tcccaaagag 780
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 agggacaaat agcgaggaca ttataaaaaa gaggggtttc aaggaaacgag ccgtagatat 960
 aaaaatactc gccccccgcc gtggtggaat gaaaacgcga caagcggacg gcgctagtat 1020
 aacgagacag gacacaagaa caagaagaca acagcgagga gcaagcgtga gag 1073

<210> 52
 <211> 399
 <212> DNA
 <213> Homo sapien

<400> 52
 gtgatggatc ggccgcccgt ggcaggtggc tggcctcagc agcgcgaggt gctgcccgcg 60
 tgcgtagaag tatcaatcag ccggttgctt ttgtgagaag aattccttgg actgcccgcg 120
 cgagtcagct gaaagaacac tttgcacagt tgggccatgt cagaagggtgc attttacctt 180
 ttgacaagga gactggcttt cacagaggtt tgggggtggg tcagtwtttc ttcagaagaa 240

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ggacttcggg aatgcactac aacaggaaaa atcatattat agatggagta aagggtccagg      300
ttcacactag aaggccaaaa ctttccgcaa acactctgat gatgaaaaaa gaaaaggatt      360
ttttgaggac tgccagccta ttttaataaag gttaaccaa                               399
```

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<210> 53
<211> 1029
<212> DNA
<213> Homo sapien
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<220>
<221> misc_feature
<222> (13)..(13)
<223> n=a, c, g or t
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<220>
<221> misc_feature
<222> (307)..(307)
<223> n=a, c, g or t
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<221> misc_feature
<222> (557)..(557)
<223> n=a, c, g or t
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<220>
<221> misc_feature
<222> (559)..(560)
<223> n=a, c, g or t
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<220>
<221> misc_feature
<222> (566)..(566)
<223> n=a, c, g or t
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<220>
<221> misc_feature
<222> (573)..(573)
<223> n=a, c, g or t
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<220>
<221> misc_feature
<222> (584)..(584)
<223> n=a, c, g or t
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<220>
<221> misc_feature
<222> (587)..(587)
<223> n=a, c, g or t
```

53

<220>
<221> misc_feature
<222> (653)..(653)
<223> n=a, c, g or t

<220>
<221> misc_feature
<222> (661)..(664)
<223> n=a, c, g or t

<220>
<221> misc_feature
<222> (666)..(667)
<223> n=a, c, g or t

<220>
<221> misc_feature
<222> (670)..(670)
<223> n=a, c, g or t

<220>
<221> misc_feature
<222> (673)..(673)
<223> n=a, c, g or t

<220>
<221> misc_feature
<222> (676)..(676)
<223> n=a, c, g or t

<220>
<221> misc_feature
<222> (688)..(688)
<223> n=a, c, g or t

<220>
<221> misc_feature
<222> (703)..(703)
<223> n=a, c, g or t

<220>
<221> misc_feature
<222> (976)..(976)
<223> n=a, c, g or t

<220>
<221> misc_feature
<222> (991)..(991)
<223> n=a, c, g or t

<400> 53

54

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tcctggcgggc gctgggtcctg tctctcattc tgccgaggag cagccagtac atcaagtggg    180
tcgtctctgc ggggcttgcc caggtcagcg agttttcctt tgtcctgggg agccggggcg    240
gaagagcggg cgtcatctct cgggaggtgt acctccttat actgagtgtg accacgctca    300
gcctctngct cgccccgggt ctgtggagag ctgcaatcac gaggtgtgtg ccagaccgg    360
agagacgggtc cagcctctga tggctcggag atgatggacc gtggaaggga agcgtctgtg    420
gggagtgage gcttagatgg ccagcagctg ctccctctgg gaagctcgca ccttggcaac    480
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ctatttgcct tttattgtaa cttttaaatg aaataatttc atgtcaattt ctattagata    960
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<210> 54
 <211> 315
 <212> DNA
 <213> Homo sapien

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<400> 54
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cctcttcaag ggcctttttg gcaaaaaaga aatgogcatc ctcatgggtg gcctggatgc    180
tgacgggaag accacgatcc tctacaagct taagctgggt gagatcgtga ccaccattcc    240
caccataggg ttcaacgtgg aaaccgtgga gtacctcggc cgcgaccacg ctatccatca    300
cactggcgcc gctcg                                     315

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<210> 55
 <211> 685
 <212> DNA
 <213> Homo sapien

55

<220>
 <221> misc_feature
 <222> (3)..(3)
 <223> n=a, c, g or t

<400> 55
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 sacakacwrw aaggcaagcc catgtcaggg cgatcctggg gtcaaagtgt ccatgtcccg 120
 gggtgatgct ggccacactt tgtagagagt ttagcaacac agbtgtgvct tagtcagcgt 180
 aggaatcctc actaaakgca ggagaagttc cattcaaagt gccaatggat agagtcaaca 240
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 twaaawaaaa tatttagattg agggg 685

<210> 56
 <211> 507
 <212> DNA
 <213> Homo sapien

<220>
 <221> misc_feature
 <222> (2)..(2)
 <223> n=a, c, g or t

<220>
 <221> misc_feature
 <222> (39)..(39)
 <223> n=a, c, g or t

<400> 56
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 gaagattatt tcaagtggaa tatgccattg aggctatcaa gcttggttct acagccattg 180
 catccagacc tcagagggtg tatgtctagc tgtggagaag agaattacct cccactaat 240
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 tgggctaatt gctgatgcta aaactttaat tgataaagcc agagtggaga cacagaacca 360

56

ctggttcacc tataatgaga caatgacagt tgagagtgtg acccaggctg tgtccaatct 420
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 agcattgttg tttggaggag ttgatga 507

<210> 57
 <211> 1284
 <212> DNA
 <213> Homo sapien

<400> 57
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 tgtctcgctc cgtggcctta gctgtgctcg cgctactctc tctttctggc ctggaggcta 180
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 aaaaagcacc accatgaatc cggg 1284

<210> 58
 <211> 1043

57

<212> DNA

<213> Homo sapien

<400> 58

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cgtttcctct caggcgcgcc ctgagtgggg gaccgcgagg gctggaagga acgcggggct      180
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<210> 59

<211> 1113

<212> DNA

<213> Homo sapien

<400> 59

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tcccgggcgc ccgcctccct gcccgcgcgc cgcgcgcccc gaggggaggg aggaagtggg      300
aagtcacccc tgtccccgcc gagaagggt gtgcgaggct ccacccttgc caccgcagag      360
gcccggggct gaaagcaggc agccaggccc aggccctgct gacctaagcc gcgacccctg      420

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58

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accctcggcc tcgccctcta gccccaccca gccttcagga gcaagattcc cgcccgccacc 480
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<210> 60
 <211> 716
 <212> DNA
 <213> Homo sapien

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<400> 60
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cccaccttg gctgcttgca gggccactgt ccaggcaaat gccaggcctt gtcccagat 660
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<210> 61
 <211> 648
 <212> DNA
 <213> Homo sapien

59

<400> 61
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<210> 62
 <211> 1944
 <212> DNA
 <213> Homo sapien

<400> 62
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 ttaaaaaata tagtcaatag gttactaaga tattgcttag cgttaagttt ttaacgtaat 240
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60

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 tcccagcact ttgaggttgg ctgggagttc aagaccagcc tggccaacat gtcagaacta 1920
 ctaaaaataa agaaatcagc catg 1944

<210> 63
 <211> 4023
 <212> DNA
 <213> Homo sapien

<400> 63
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62

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<210> 64

<211> 1929

<212> DNA

<213> Homo sapien

<400> 64
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64

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 <212> DNA
 <213> Homo sapien

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 <212> DNA
 <213> Homo sapien

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65

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257

<210> 67

<211> 972

<212> DNA

<213> Homo sapien

<400> 67

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<210> 68

<211> 824

<212> DNA

<213> Homo sapien

<400> 68

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66

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<210> 69
 <211> 460
 <212> DNA
 <213> Homo sapien

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<210> 70
 <211> 944
 <212> DNA
 <213> Homo sapien

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67

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<210> 71
 <211> 856
 <212> DNA
 <213> Homo sapien

<400> 71		
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 <213> Homo sapien

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69

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71

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<213> Homo sapien

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74

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75

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 <211> 570
 <212> DNA
 <213> Homo sapien

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76

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 <213> Homo sapien

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 <211> 1229
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 <213> Homo sapien

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 <211> 1016
 <212> DNA
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<211> 6164

<212> DNA

<213> Homo sapien

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 <213> Homo sapien

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 <213> Homo sapien

<400> 81
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83

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 <212> DNA
 <213> Homo sapien

<400> 82
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84

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<211> 1408

<212> DNA

<213> Homo sapien

<400> 84

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85

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<400> 85
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86

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 <211> 923
 <212> DNA
 <213> Homo sapien

<400> 86
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<400> 87
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<212> DNA
<213> Homo sapien

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112

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<400> 98

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<211> 3496

<212> DNA

<213> Homo sapien

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116

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117

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<210> 100
 <211> 420
 <212> PRT
 <213> Homo sapien

<400> 100

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Met Glu Val Pro Pro Arg Leu Ser His Val Pro Pro Pro Leu Phe Pro
1           5           10           15

```

```

Ser Ala Pro Ala Thr Leu Ala Ser Arg Ser Leu Ser His Trp Arg Pro
20           25           30

```

```

Arg Pro Pro Arg Gln Leu Ala Pro Leu Leu Pro Ser Leu Ala Pro Ser
35           40           45

```

```

Ser Ala Arg Gln Gly Ala Arg Arg Ala Gln Arg His Val Thr Ala Gln
50           55           60

```

```

Gln Pro Ser Arg Leu Ala Gly Gly Ala Ala Ile Lys Gly Gly Arg Arg
65           70           75           80

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118

Arg Arg Pro Asp Leu Phe Arg Arg His Phe Lys Ser Ser Ser Ile Gln
 85 90 95

Arg Ser Ala Ala Ala Ala Ala Ala Thr Arg Thr Ala Arg Gln His Pro
 100 105 110

Pro Ala Asp Ser Ser Val Thr Met Glu Asp Met Asn Glu Tyr Ser Asn
 115 120 125

Ile Glu Glu Phe Ala Glu Gly Ser Lys Ile Asn Ala Ser Lys Asn Gln
 130 135 140

Gln Asp Asp Gly Lys Met Phe Ile Gly Gly Leu Ser Trp Asp Thr Ser
 145 150 155 160

Lys Lys Asp Leu Thr Glu Tyr Leu Ser Arg Phe Gly Glu Val Val Asp
 165 170 175

Cys Thr Ile Lys Thr Asp Pro Val Thr Gly Arg Ser Arg Gly Phe Gly
 180 185 190

Phe Val Leu Phe Lys Asp Ala Ala Ser Val Asp Lys Val Leu Glu Leu
 195 200 205

Lys Glu His Lys Leu Asp Gly Lys Leu Ile Asp Pro Lys Arg Ala Lys
 210 215 220

Ala Leu Lys Gly Lys Glu Pro Pro Lys Lys Val Phe Val Gly Gly Leu
 225 230 235 240

Ser Pro Asp Thr Ser Glu Glu Gln Ile Lys Glu Tyr Phe Gly Ala Phe
 245 250 255

Gly Glu Ile Glu Asn Ile Glu Leu Pro Met Asp Thr Lys Thr Asn Glu
 260 265 270

Arg Arg Gly Phe Cys Phe Ile Thr Tyr Thr Asp Glu Glu Pro Val Lys
 275 280 285

Lys Leu Leu Glu Ser Arg Tyr His Gln Ile Gly Ser Gly Lys Cys Glu
 290 295 300

Ile Lys Val Ala Gln Pro Lys Glu Val Tyr Arg Gln Gln Gln Gln Gln
 305 310 315 320

Gln Lys Gly Gly Arg Gly Ala Ala Ala Gly Gly Arg Gly Gly Thr Arg

119

325 330 335

Gly Arg Gly Arg Gly Gln Gly Gln Asn Trp Asn Gln Gly Phe Asn Asn
340 345 350

Tyr Tyr Asp Gln Gly Tyr Gly Asn Tyr Asn Ser Ala Tyr Gly Gly Asp
355 360 365

Gln Asn Tyr Ser Gly Tyr Gly Gly Tyr Asp Tyr Thr Gly Tyr Asn Tyr
370 375 380

Gly Asn Tyr Gly Tyr Gly Gln Gly Tyr Ala Asp Tyr Ser Gly Gln Gln
385 390 395 400

Ser Thr Tyr Gly Lys Ala Ser Arg Gly Gly Gly Asn His Gln Asn Asn
405 410 415

Tyr Gln Pro Tyr
420

<210> 101
<211> 100
<212> PRT
<213> Homo sapien

<400> 101

Arg Gly Val Leu Glu Asp Pro Ser Arg Pro Cys His Lys Leu Gln Gln
1 5 10 15

Gln Gln Gln Gln Lys Gly Gly Arg Gly Ala Ala Ala Gly Gly Arg Gly
20 25 30

Gly Thr Arg Gly Arg Gly Arg Gly Gln Gly Gln Asn Trp Asn Gln Gly
35 40 45

Phe Asn Asn Tyr Tyr Asp Gln Gly Tyr Gly Asn Tyr Asn Ser Ala Tyr
50 55 60

Gly Gly Asp Gln Asn Tyr Ser Gly Tyr Gly Gly Tyr Asp Tyr Thr Gly
65 70 75 80

Tyr Asn Tyr Gly Asn Tyr Gly Tyr Gly Gln Gly Tyr Ala Asp Tyr Ser
85 90 95

Gly Lys Asn Ile
100

120

<210> 102
<211> 104
<212> PRT
<213> Homo sapien

<400> 102

Arg Gly Val Leu Glu Asp Pro His Ala His Val Thr Ser Cys Ser Asn
1 5 10 15

Ser Asn Asn Lys Lys Val Glu Glu Val Leu Gln Leu Val Asp Glu Val
20 25 30

Val Arg Gly Val Val Ala Glu Val Arg Ala Lys Thr Gly Thr Lys Asp
35 40 45

Leu Ile Thr Ile Met Ile Lys Asp Met Glu Ile Thr Ile Val Pro Met
50 55 60

Val Val Ile Lys Thr Ile Val Ala Met Ala Asp Met Ile Ile Leu Gly
65 70 75 80

Ile Thr Met Gly Thr Met Asp Met Asp Arg Asp Met Gln Thr Thr Val
85 90 95

Val Arg Ile Phe Asn Leu Ile Leu
100

<210> 103
<211> 36
<212> PRT
<213> Homo sapien

<400> 103

Gly Arg Leu Leu Leu Leu Leu Glu Phe Lys Leu Leu Thr Met Tyr
1 5 10 15

Gly Leu Met Pro Gly Lys Cys Cys Gly Gly Gly Ser Gln Glu Asp Trp
20 25 30

Pro Arg Glu Pro
35

<210> 104
<211> 38
<212> PRT
<213> Homo sapien

<400> 104

121

Arg Pro Pro Thr Thr Thr Thr Ala Arg Ile Gln Ala Ser Asn Asp Val
 1 5 10 15

Arg Ala His Ala Trp Glu Val Leu Trp Trp Gly Leu Pro Gly Gly Leu
 20 25 30

Ala Gln Arg Ala Leu Arg
 35

<210> 105
 <211> 77
 <212> PRT
 <213> Homo sapien

<400> 105

Met Asp Ala Trp Ser Arg Pro Arg Tyr Val Gln Met Thr Lys Ser Leu
 1 5 10 15

Gln Cys Leu Gln Val Gln Thr Glu Leu Lys Glu Cys Met Val Val Lys
 20 25 30

Thr Tyr Leu Ile Ser Ser Ile Pro Leu Gln Gly Ala Phe Asn Tyr Lys
 35 40 45

Tyr Thr Ala Cys Leu Cys Asp Asp Asn Pro Lys Thr Phe Tyr Val Gly
 50 55 60

Leu Leu His Gln Gln Asn Cys Ala Asn Cys Ser Arg Arg
 65 70 75

<210> 106
 <211> 121
 <212> PRT
 <213> Homo sapien

<400> 106

Asn Trp Val Leu Met Leu Leu Glu Arg Arg Gln Cys Asp Gly Cys Val
 1 5 10 15

Val Ala Ala Glu Val Arg Pro Asn Asp Glu Val Thr Ala Val Leu Ala
 20 25 30

Val Gln Thr Glu Leu Lys Glu Cys Met Val Val Lys Thr Tyr Leu Ile
 35 40 45

Ser Ser Ile Pro Leu Gln Gly Ala Phe Asn Tyr Lys Tyr Thr Ala Cys
 50 55 60

122

Leu Cys Asp Asp Asn Pro Lys Thr Phe Tyr Trp Asp Phe Tyr Thr Asn
65 70 75 80

Arg Thr Val Gln Ile Ala Ala Val Val Asp Val Ile Arg Glu Leu Gly
85 90 95

Ile Cys Pro Asp Asp Ala Ala Val Ile Pro Ile Lys Asn Asn Arg Phe
100 105 110

Tyr Thr Ile Glu Ile Leu Lys Val Glu
115 120

<210> 107

<211> 66

<212> PRT

<213> Homo sapien

<400> 107

Met Asp Glu Arg Pro Pro Ala Gln Val Val Gln Thr Glu Leu Lys Glu
1 5 10 15

Cys Met Val Val Lys Thr Tyr Leu Ile Ser Ser Ile Pro Leu Gln Gly
20 25 30

Ala Phe Asn Tyr Lys Tyr Thr Ala Cys Leu Cys Asp Asp Asn Pro Lys
35 40 45

Thr Phe Tyr Val Gly Leu Leu His Gln Gln Asn Cys Ala Asn Cys Ser
50 55 60

Arg Arg
65

<210> 108

<211> 97

<212> PRT

<213> Homo sapien

<400> 108

Trp Met Ser Gly Arg Arg Ala Gly Val Gln Thr Glu Leu Lys Glu Cys
1 5 10 15

Met Val Val Lys Thr Tyr Leu Ile Ser Ser Ile Pro Leu Gln Gly Ala
20 25 30

Phe Asn Tyr Lys Tyr Thr Ala Cys Leu Cys Asp Asp Asn Pro Lys Thr

123

35 40 45

Phe Tyr Trp Asp Phe Tyr Thr Asn Arg Thr Val Gln Ile Ala Ala Val
50 55 60

Val Asp Val Ile Arg Glu Leu Gly Ile Cys Pro Asp Asp Ala Ala Val
65 70 75 80

Ile Pro Ile Lys Asn Asn Arg Phe Tyr Thr Ile Glu Ile Leu Lys Val
85 90 95

Glu

<210> 109
<211> 155
<212> PRT
<213> Homo sapien

<400> 109

Met Leu Leu Pro Asn Lys Lys Lys His Asn Thr Thr Lys Thr Lys Asn
1 5 10 15

Asn Lys Pro Pro Gly Gly Asn Pro Gly Pro His Thr Arg Gly Pro Arg
20 25 30

Gly Trp Arg Asn Val Gly Leu Pro Ala His Gln Thr Pro Thr Gln Gln
35 40 45

Phe Ala Gly Lys Pro Pro Pro Pro Pro Ala His Pro Pro Pro Pro Ala
50 55 60

Lys Arg Thr His Lys Arg Arg Arg Pro Arg Gly Thr Arg Asp Thr Arg
65 70 75 80

Arg Glu Ala Glu Pro Thr Gly Pro Arg Arg Glu Gln Asp Thr Glu Arg
85 90 95

Arg Lys Arg Asp Arg Gly Cys Arg His Ala Ser Ser Thr Ala Gln Arg
100 105 110

Pro Gly Ala Gly His Pro Glu Ala Gly Thr Glu Gln Gln Pro Gln Asp
115 120 125

Ala Ala Asp Pro Arg Glu Arg Gly Ala Asp Arg Asn Gln Thr Arg Gly
130 135 140

124

Pro Ala Thr Arg Gly Ala Ala Lys Thr Ser Gly
 145 150 155

<210> 110
 <211> 172
 <212> PRT
 <213> Homo sapien
 <400> 110

Arg Asn Leu Ala Gly Ile Ser Ala Val Val Tyr Lys Ile Asn Phe Leu
 1 5 10 15

Thr Cys Phe Ser Leu Thr Lys Lys Asn Thr Thr Gln Gln Lys Gln Lys
 20 25 30

Thr Thr Asn Arg Leu Gly Ala Thr Pro Gly His Thr Arg Ala Asp Pro
 35 40 45

Ala Gly Gly Glu Thr Trp Ala Ser Arg Pro Thr Lys Pro Pro His Asn
 50 55 60

Asn Ser Arg Ala Asn Pro Pro Pro Pro Pro His Thr His Pro Pro Arg
 65 70 75 80

Pro Lys Glu Pro Thr Ser Gly Gly Asp Arg Glu Gly Arg Glu Thr Pro
 85 90 95

Asp Ala Arg Gln Ser Gln Arg Ala Gln Gly Gly Ser Lys Thr Pro Ser
 100 105 110

Gly Gly Asn Gly Thr Glu Ala Ala Gly Met Pro Ala Ala Arg Arg Arg
 115 120 125

Gly Gln Gly Arg Gly Thr Arg Arg Pro Gly Arg Ser Ser Ser Arg Arg
 130 135 140

Thr Gln Arg Thr Pro Gly Ser Glu Ala Pro Thr Ala Thr Lys Arg Gly
 145 150 155 160

Asp Pro Pro His Ala Gly Arg Pro Arg Gln Ala Ala
 165 170

<210> 111
 <211> 44
 <212> PRT
 <213> Homo sapien

125

<400> 111

Met Leu Leu Glu Arg Arg Gln Cys Asp Gly Cys Val Val Ala Ala Glu
 1 5 10 15

Arg Gln Ser Lys Asn Leu Leu Arg Gly Thr Phe Thr Pro Thr Glu Leu
 20 25 30

Cys Lys Leu Gln Pro Ser Leu Met Leu Phe Gly Asn
 35 40

<210> 112

<211> 72

<212> PRT

<213> Homo sapien

<400> 112

Asn Lys Leu Leu Asn Met Leu Leu Gln Lys Lys Thr Lys Lys Gln Lys
 1 5 10 15

Lys Lys Glu Ser Gly Gly Val His Pro Trp Ala Ile Arg Cys Gly Val
 20 25 30

Pro Trp Cys Val Glu Phe Gly Ser Pro Gly Pro Gln Phe Pro Asn Asn
 35 40 45

Asn Phe Thr Glu Gln Gly Gln Arg Lys Thr Thr Ser Thr Lys Lys Pro
 50 55 60

Asn Pro Thr His Lys Glu Thr Arg
 65 70

<210> 113

<211> 192

<212> PRT

<213> Homo sapien

<400> 113

Met Pro Val Trp Pro Leu Asp Trp Leu Gly Arg Val Ala Gly Ala Lys
 1 5 10 15

Val Leu Trp Ala Ile His Phe Ile Gln Ala Gly Leu Leu Ser Ala Leu
 20 25 30

Gly Ser Leu Ile Leu Met Ile Trp Leu Met Ala Thr Pro His Ser His
 35 40 45

Glu Thr Glu Gln Lys Arg Leu Gly Leu Leu Ala Gly Phe Ala Phe Leu

126

50

55

60

Thr Gly Val Gly Leu Gly Pro Ala Leu Glu Phe Cys Ile Ala Val Asn
65 70 75 80

Pro Ser Ile Leu Pro Thr Ala Phe Met Gly Thr Ala Met Ile Phe Thr
85 90 95

Cys Phe Thr Leu Ser Ala Leu Tyr Ala Arg Arg Arg Ser Tyr Leu Phe
100 105 110

Leu Gly Gly Ile Leu Met Ser Ala Leu Ser Leu Leu Leu Leu Ser Ser
115 120 125

Leu Gly Asn Val Phe Phe Gly Ser Ile Trp Leu Phe Gln Ala Asn Leu
130 135 140

Tyr Val Gly Leu Val Val Met Cys Gly Phe Val Leu Phe Asp Thr Gln
145 150 155 160

Leu Ile Ile Glu Lys Ala Glu His Gly Asp Gln Asp Tyr Ile Trp His
165 170 175

Cys Ile Asp Leu Phe Leu Asp Phe Ile Thr Gly Leu Gln Lys Asn Ser
180 185 190

<210> 114

<211> 210

<212> PRT

<213> Homo sapien

<400> 114

Arg Gly Tyr Met Pro Val Trp Pro Leu Asp Trp Leu Gly Arg Val Ala
1 5 10 15

Gly Ala Lys Val Leu Trp Ala Ile His Phe Ile Gln Ala Gly Leu Leu
20 25 30

Ser Ala Leu Gly Ser Leu Ile Leu Met Ile Trp Leu Met Ala Thr Pro
35 40 45

His Ser His Glu Thr Glu Gln Lys Arg Leu Gly Leu Leu Ala Gly Phe
50 55 60

Ala Phe Leu Thr Gly Val Gly Leu Gly Pro Ala Leu Glu Phe Cys Ile
65 70 75 80

127

Ala Val Asn Pro Ser Ile Leu Pro Thr Ala Phe Met Gly Thr Ala Met
85 90 95

Ile Phe Thr Cys Phe Thr Leu Ser Ala Leu Tyr Ala Arg Arg Arg Ser
100 105 110

Tyr Leu Phe Leu Gly Gly Ile Leu Met Ser Ala Leu Ser Leu Leu Leu
115 120 125

Leu Ser Ser Leu Gly Asn Val Phe Phe Gly Ser Ile Trp Leu Phe Gln
130 135 140

Ala Asn Leu Tyr Val Gly Leu Val Val Met Cys Gly Phe Val Leu Phe
145 150 155 160

Asp Thr Gln Leu Ile Ile Glu Lys Ala Glu His Gly Asp Gln Asp Tyr
165 170 175

Ile Trp His Cys Ile Asp Leu Phe Leu Asp Phe Ile Thr Val Phe Arg
180 185 190

Lys Leu Met Met Ile Leu Ala Met Asn Glu Lys Asp Lys Lys Lys Glu
195 200 205

Lys Lys
210

<210> 115
<211> 90
<212> PRT
<213> Homo sapien

<400> 115

Met His Ala Tyr Ser Cys Ala Leu Leu Ser Gly Glu Leu Arg Ile Arg
1 5 10 15

Leu Leu Arg Arg Lys Asn Leu Asn Ile Asn Arg Lys Ser Trp Arg Lys
20 25 30

Phe Ala Thr Pro Ser Ser Pro Ser Cys Thr Arg Val Gln Glu Ala Cys
35 40 45

Gln Glu Glu Cys Leu Gly Asp Phe Leu Val Val Glu Leu Leu Pro Leu
50 55 60

Val Val Leu Pro Gln Gly Pro Pro Leu Lys Arg Leu Ile Lys Pro Thr

128

65

70

75

80

Lys Cys Arg Cys Ser Ile Val Pro His Ile
85 90

<210> 116

<211> 244

<212> PRT

<213> Homo sapien

<400> 116

Ser Asn Ala Cys Ser Ser Gly Ala Ser Cys Asp Gly Cys Gly Arg Pro
1 5 10 15

Gly Arg Tyr Ala Val Arg Thr Tyr Gly Arg Glu Ile Gln Val Thr Glu
20 25 30

Leu Leu Asp Lys Leu Asp Phe Tyr Val Leu Pro Val Leu Asn Ile Asp
35 40 45

Gly Tyr Ile Tyr Thr Trp Thr Lys Ser Arg Phe Trp Arg Lys Thr Arg
50 55 60

Ser Thr His Thr Gly Ser Ser Cys Ile Gly Thr Asp Pro Asn Arg Asn
65 70 75 80

Phe Asp Ala Gly Trp Cys Glu Ile Gly Ala Ser Arg Asn Pro Cys Asp
85 90 95

Glu Thr Tyr Cys Gly Pro Ala Ala Glu Ser Glu Lys Glu Thr Lys Ala
100 105 110

Leu Ala Asp Phe Ile Arg Asn Lys Leu Ser Ser Ile Lys Ala Tyr Leu
115 120 125

Thr Ile His Ser Tyr Ser Gln Met Met Ile Tyr Pro Tyr Ser Tyr Ala
130 135 140

Tyr Lys Leu Gly Glu Asn Asn Ala Glu Leu Asn Ala Leu Ala Lys Ala
145 150 155 160

Thr Val Lys Glu Leu Ala Ser Leu His Gly Thr Lys Tyr Thr Tyr Gly
165 170 175

Pro Gly Ala Thr Thr Ile Tyr Pro Ala Ala Gly Gly Ser Asp Asp Trp
180 185 190

129

Ala Tyr Asp Gln Gly Ile Arg Tyr Ser Phe Thr Phe Glu Leu Arg Asp
 195 200 205

Thr Gly Arg Tyr Gly Phe Leu Leu Pro Glu Ser Gln Ile Arg Ala Thr
 210 215 220

Cys Glu Glu Thr Phe Leu Ala Ile Lys Tyr Val Ala Ser Tyr Val Leu
 225 230 235 240

Glu His Leu Tyr

<210> 117
 <211> 67
 <212> PRT
 <213> Homo sapien

<400> 117

Met Leu Glu Arg Arg Ser Val Met Asp Ala Trp Ser Arg Pro Gly Thr
 1 5 10 15

Val Ala Leu Arg Glu Ile Arg Arg Tyr Gln Lys Ser Thr Glu Leu Leu
 20 25 30

Ile Arg Lys Leu Pro Phe Gln Arg Leu Val Arg Glu Ile Ala Gln Asp
 35 40 45

Phe Lys Thr Asp Leu Arg Phe Gln Ser Ala Ala Ile Arg Cys Phe Ala
 50 55 60

Gly Gly Lys
 65

<210> 118
 <211> 106
 <212> PRT
 <213> Homo sapien

<400> 118

Met Leu Glu Arg Arg Ser Val Met Asp Ala Trp Ser Arg Pro Gly Thr
 1 5 10 15

Val Ala Leu Arg Glu Ile Arg Arg Tyr Gln Lys Ser Thr Glu Leu Leu
 20 25 30

Ile Arg Lys Leu Pro Phe Gln Arg Leu Val Arg Glu Ile Ala Gln Asp
 35 40 45

130

Phe Lys Thr Asp Leu Arg Phe Gln Ser Ala Ala Ile Gly Ala Leu Gln
 50 55 60

Glu Ala Ser Glu Ala Tyr Leu Val Gly Leu Phe Glu Asp Thr Asn Leu
 65 70 75 80

Cys Ala Ile His Ala Lys Arg Val Thr Ile Met Pro Lys Asp Ile Gln
 85 90 95

Leu Ala Arg Arg Ile Arg Gly Glu Arg Ala
 100 105

<210> 119

<211> 257

<212> PRT

<213> Homo sapien

<400> 119

Met Ile Asn Leu Arg Glu Asn Ile Ser Leu Ser Ile His His Arg Ala
 1 5 10 15

Lys Tyr Lys Ala Leu Ser Ser Thr Leu Tyr Thr Ser Ser His Gln Lys
 20 25 30

Gln Ile Ser Ser Leu Arg Asp Glu Val Glu Ala Lys Ala Lys Leu Ile
 35 40 45

Thr Asp Leu Gln Asp Gln Asn Gln Lys Met Met Leu Glu Gln Glu Arg
 50 55 60

Leu Arg Val Glu His Glu Lys Leu Lys Ala Thr Asp Gln Glu Lys Ser
 65 70 75 80

Arg Lys Leu His Glu Leu Thr Val Met Gln Asp Arg Arg Glu Gln Ala
 85 90 95

Arg Gln Asp Leu Lys Gly Leu Glu Glu Thr Val Ser Ala Glu Ile Asp
 100 105 110

Ser Asp Asp Thr Gly Gly Ser Ala Ala Gln Lys Gln Lys Ile Ser Phe
 115 120 125

Leu Glu Asn Asn Leu Glu Gln Leu Thr Lys Val His Lys Gln Leu Val
 130 135 140

131

Arg Asp Asn Ala Asp Leu Arg Cys Glu Leu Pro Lys Leu Glu Lys Arg
 145 150 155 160

Leu Arg Ala Thr Ala Glu Arg Val Lys Ala Leu Glu Ser Ala Leu Lys
 165 170 175

Glu Ala Lys Glu Asn Ala Ser Arg Asp Arg Lys Arg Tyr Gln Gln Glu
 180 185 190

Val Asp Arg Ile Lys Glu Ala Val Arg Ser Lys Asn Met Ala Arg Arg
 195 200 205

Gly His Ser Ala Gln Ile Ala Lys Pro Ile Arg Pro Gly Gln His Pro
 210 215 220

Ala Ala Ser Pro Thr His Pro Ser Ala Ile Arg Gly Gly Gly Ala Phe
 225 230 235 240

Val Gln Asn Ser Gln Pro Val Ala Val Arg Gly Gly Gly Gly Lys Gln
 245 250 255

Val

<210> 120
 <211> 190
 <212> PRT
 <213> Homo sapien

<400> 120

Thr Leu Tyr Thr Ser Lys Gln Glu Thr Glu Glu Gly Gly Arg Asp Arg
 1 5 10 15

Ala Lys Glu Leu Gln Thr Leu His Asn Leu Arg Lys Leu Phe Val Gln
 20 25 30

Asp Leu Ala Thr Arg Val Lys Lys Ser Ala Glu Ile Asp Ser Asp Asp
 35 40 45

Thr Gly Gly Ser Ala Ala Gln Lys Gln Lys Ile Ser Phe Leu Glu Asn
 50 55 60

Asn Leu Glu Gln Leu Thr Lys Val His Lys Gln Leu Val Arg Asp Asn
 65 70 75 80

Ala Asp Leu Arg Cys Glu Leu Pro Lys Leu Glu Lys Arg Leu Arg Ala
 85 90 95

132

Thr Ala Glu Arg Val Lys Ala Leu Glu Ser Ala Leu Lys Glu Ala Lys
 100 105 110

Glu Asn Ala Ser Arg Asp Arg Lys Arg Tyr Gln Gln Glu Val Asp Arg
 115 120 125

Ile Lys Glu Ala Val Arg Ser Lys Asn Met Ala Arg Arg Gly His Ser
 130 135 140

Ala Gln Ile Ala Lys Pro Ile Arg Pro Gly Gln His Pro Ala Ala Ser
 145 150 155 160

Pro Thr His Pro Ser Ala Ile Arg Gly Gly Gly Ala Phe Val Gln Asn
 165 170 175

Ser Gln Pro Val Ala Val Arg Gly Gly Gly Gly Lys Gln Val
 180 185 190

<210> 121
 <211> 180
 <212> PRT
 <213> Homo sapien

<220>
 <221> MISC_FEATURE
 <222> (2)..(2)
 <223> X=any amino acid

<400> 121

Arg Xaa Gly Arg Asp Arg Ala Lys Glu Leu Gln Thr Leu His Asn Leu
 1 5 10 15

Arg Lys Leu Phe Val Gln Asp Leu Ala Thr Arg Val Lys Lys Ser Ala
 20 25 30

Glu Ile Asp Ser Asp Asp Thr Gly Gly Ser Ala Ala Gln Lys Gln Lys
 35 40 45

Ile Ser Phe Leu Glu Asn Asn Leu Glu Gln Leu Thr Lys Val His Lys
 50 55 60

Gln Leu Val Arg Asp Asn Ala Asp Leu Arg Cys Glu Leu Pro Lys Leu
 65 70 75 80

Glu Lys Arg Leu Arg Ala Thr Ala Glu Arg Val Lys Ala Leu Glu Ser
 85 90 95

133

Ala Leu Lys Glu Ala Lys Glu Asn Ala Ser Arg Asp Arg Lys Arg Tyr
 100 105 110

Gln Gln Glu Val Asp Arg Ile Lys Glu Ala Val Arg Ser Lys Asn Met
 115 120 125

Ala Arg Arg Gly His Ser Ala Gln Ile Ala Lys Pro Ile Arg Pro Gly
 130 135 140

Gln His Pro Ala Ala Ser Pro Thr His Pro Ser Ala Ile Arg Gly Gly
 145 150 155 160

Gly Ala Phe Val Gln Asn Ser Gln Pro Val Ala Val Arg Gly Gly Gly
 165 170 175

Gly Lys Gln Val
 180

<210> 122
 <211> 103
 <212> PRT
 <213> Homo sapien

<400> 122

Met Ala Leu Arg Thr Ala Thr Ser Trp Asp Gly Thr Ala Gly Pro Arg
 1 5 10 15

Arg Ser Ala Arg Gly Gly Glu Ala Arg Gly Pro Arg Ala Ala Leu Gly
 20 25 30

Arg Arg Gly Arg Pro Glu Pro Glu Ala Thr Pro Ala Trp Arg Val Pro
 35 40 45

Ala Gly Arg Arg Gly Leu Ser Gly Gly Trp Arg Ala Ala Ser Pro Cys
 50 55 60

Thr Ala Pro Gly Arg Ser Cys Trp Gly Arg Arg Ala Ser Arg Ala Leu
 65 70 75 80

Pro Pro Pro Pro Leu Leu Pro Leu Leu Leu Gly Trp Ser Arg Ala Ala
 85 90 95

Trp Ala Arg Ala Arg Trp Pro
 100

134

<210> 123
 <211> 126
 <212> PRT
 <213> Homo sapien

<400> 123

Lys Ala Leu Leu Gly Leu Pro Leu Gly Ser Ala Cys Arg Ala Gly Pro
 1 5 10 15

Thr Ala Pro Gly Ser Glu Pro Trp Arg Ser Gly Arg Pro Leu Pro Gly
 20 25 30

Thr Gly Arg Pro Gly Arg Asp Asp Pro Arg Gly Ala Ala Arg Pro Ala
 35 40 45

Gly Arg Ala Gln Pro Ser Gly Gly Gly Ala Gly Arg Ser Pro Arg Pro
 50 55 60

Pro Gln Pro Gly Gly Ser Arg Pro Gly Gly Gly Gly Ser Ala Ala Gly
 65 70 75 80

Gly Gly Pro Arg Leu His Ala Arg Arg Gln Gly Gly Ala Ala Gly Gly
 85 90 95

Ala Gly Pro Arg Ala His Cys Arg Arg Arg Arg Cys Cys Arg Tyr Cys
 100 105 110

Trp Ala Gly Ala Gly Arg Pro Gly Pro Ala Arg Ala Gly Arg
 115 120 125

<210> 124
 <211> 55
 <212> PRT
 <213> Homo sapien

<400> 124

Met Ala Thr Lys Ala Val Cys Val Leu Lys Gly Asp Gly Pro Val Gln
 1 5 10 15

Gly Ile Ile Asn Phe Glu Gln Lys Ala Val Pro Val Gln Val Leu Thr
 20 25 30

Leu Ile Leu Tyr Pro Glu Asn Thr Val Gly Gln Arg Met Lys Arg Gly
 35 40 45

Met Leu Glu Thr Trp Ala Met
 50 55

135

<210> 125
 <211> 155
 <212> PRT
 <213> Homo sapien

<400> 125

Ser Arg Arg Arg Gly Ala Gly Leu Arg Arg Ser Leu Leu Gln Arg Leu
 1 5 10 15

Gly Phe Pro Leu Gln Ser Ser Glu Pro Gly Pro Arg Arg Gly Leu Ala
 20 25 30

Ser Tyr Gly Asp Glu Gly Arg Val Arg Ala Glu Gly Arg Arg Pro Ser
 35 40 45

Ala Gly His His Gln Phe Arg Ala Glu Gly Cys Thr Ser Ala Gly Pro
 50 55 60

His Phe Asn Pro Leu Ser Arg Lys His Gly Gly Pro Lys Asp Glu Glu
 65 70 75 80

Arg His Val Gly Asp Leu Gly Asn Val Thr Ala Asp Lys Asp Gly Val
 85 90 95

Ala Asp Val Ser Ile Glu Asp Ser Val Ile Ser Leu Ser Gly Asp His
 100 105 110

Cys Ile Ile Gly Arg Thr Leu Val Val His Glu Lys Ala Asp Asp Leu
 115 120 125

Gly Lys Gly Gly Asn Glu Glu Ser Thr Lys Thr Gly Asn Ala Gly Ser
 130 135 140

Arg Leu Ala Cys Gly Val Ile Gly Ile Ala Gln
 145 150 155

<210> 126
 <211> 151
 <212> PRT
 <213> Homo sapien

<400> 126

Met Asp Gln Asp Gly Glu Ile Glu Asp Ser Thr Asn His Pro Leu His
 1 5 10 15

Thr Asn Thr Asn Leu Thr Thr Ile Tyr Met His Thr His Lys Ser Phe
 20 25 30

136

Ile Asn Leu Thr Thr Ile Tyr Met His Thr His Lys Thr Phe Val Arg
35 40 45

Thr Gln Asn Gln Ile Lys Lys Lys Gln Gln Asp Val Leu Gly Phe Leu
50 55 60

Glu Ala Asn Lys Ile Gly Phe Glu Glu Lys Asp Ile Ala Ala Asn Glu
65 70 75 80

Glu Asn Arg Lys Trp Met Arg Glu Asn Val Pro Glu Asn Ser Arg Pro
85 90 95

Ala Thr Gly Tyr Pro Leu Pro Pro Gln Ile Phe Asn Glu Ser Gln Tyr
100 105 110

Arg Gly Asp Tyr Asp Ala Phe Phe Glu Ala Arg Glu Asn Asn Ala Val
115 120 125

Tyr Ala Phe Leu Gly Leu Thr Ala Pro Pro Gly Ser Lys Glu Ala Glu
130 135 140

Val Gln Ala Lys Gln Gln Ala
145 150

<210> 127

<211> 416

<212> PRT

<213> Homo sapien

<400> 127

Met Pro Gly Arg Ser Cys Val Ala Leu Val Leu Leu Ala Ala Ala Val
1 5 10 15

Ser Cys Ala Val Ala Gln His Ala Pro Pro Val Ser Gly Leu Ser Arg
20 25 30

Gly Ala Glu Arg Gly Val Gln Val Arg Ala Arg Met Glu Ala Gln Trp
35 40 45

Thr Glu Asp Cys Arg Lys Ser Thr Tyr Pro Pro Ser Gly Pro Thr Tyr
50 55 60

Arg Gly Ala Val Pro Trp Tyr Thr Ile Asn Leu Asp Leu Pro Pro Tyr
65 70 75 80

137

Lys Arg Trp His Glu Leu Met Leu Asp Lys Ala Pro Val Leu Lys Val
 85 90 95

Ile Val Asn Ser Leu Lys Asn Met Ile Asn Thr Phe Val Pro Ser Gly
 100 105 110

Lys Val Met Gln Val Val Asp Glu Lys Leu Pro Gly Leu Leu Gly Asn
 115 120 125

Phe Pro Gly Pro Phe Glu Glu Glu Met Lys Gly Ile Ala Ala Val Thr
 130 135 140

Asp Ile Pro Leu Gly Glu Ile Ile Ser Phe Asn Ile Phe Tyr Glu Leu
 145 150 155 160

Phe Thr Ile Cys Thr Ser Ile Val Ala Glu Asp Lys Lys Gly His Leu
 165 170 175

Ile His Gly Arg Asn Met Asp Phe Gly Val Phe Leu Gly Trp Asn Ile
 180 185 190

Asn Asn Asp Thr Trp Val Ile Thr Glu Gln Leu Lys Pro Leu Thr Val
 195 200 205

Asn Leu Asp Phe Gln Arg Asn Asn Lys Thr Val Phe Lys Ala Ser Ser
 210 215 220

Phe Ala Gly Tyr Val Gly Met Leu Thr Gly Phe Lys Pro Gly Leu Phe
 225 230 235 240

Ser Leu Thr Leu Asn Glu Arg Phe Ser Ile Asn Gly Gly Tyr Leu Gly
 245 250 255

Ile Leu Glu Trp Ile Leu Gly Lys Lys Asp Ala Met Trp Ile Gly Phe
 260 265 270

Leu Thr Arg Thr Val Leu Glu Asn Ser Thr Ser Tyr Glu Glu Ala Lys
 275 280 285

Asn Leu Leu Thr Lys Thr Lys Ile Leu Ala Pro Ala Tyr Phe Ile Leu
 290 295 300

Gly Gly Asn Gln Ser Gly Glu Gly Cys Val Ile Thr Arg Asp Arg Lys
 305 310 315 320

Glu Ser Leu Asp Val Tyr Glu Leu Asp Ala Lys Gln Gly Arg Trp Tyr

[illegible]

139

Ile Phe Tyr Glu Leu Phe Thr Ile Cys Thr Ser Ile Val Ala Glu Asp
 130 135 140

Lys Lys Gly His Leu Ile His Gly Arg Asn Met Asp Phe Gly Val Phe
 145 150 155 160

Leu Gly Trp Asn Ile Asn Asn Asp Thr Trp Val Ile Thr Glu Gln Leu
 165 170 175

Lys Pro Leu Thr Val Asn Leu Asp Phe Gln Arg Asn Asn Lys Thr Val
 180 185 190

Phe Lys Ala Ser Ser Phe Ala Gly Tyr Val Gly Met Leu Thr Gly Phe
 195 200 205

Lys Pro Gly Leu Phe Ser Leu Thr Leu Asn Glu Arg Phe Ser Ile Asn
 210 215 220

Gly Gly Tyr Leu Gly Ile Leu Glu Trp Ile Leu Gly Lys Lys Asp Ala
 225 230 235 240

Met Trp Ile Gly Phe Leu Thr Arg Thr Val Leu Glu Asn Ser Thr Ser
 245 250 255

Tyr Glu Glu Ala Lys Asn Leu Leu Thr Lys Thr Lys Ile Leu Ala Pro
 260 265 270

Ala Tyr Phe Ile Leu Gly Gly Asn Gln Ser Gly Glu Gly Cys Val Ile
 275 280 285

Thr Arg Asp Arg Lys Glu Ser Leu Asp Val Tyr Glu Leu Asp Ala Lys
 290 295 300

Gln Gly Arg Trp Tyr Val Val Gln Thr Asn Tyr Asp Arg Trp Lys His
 305 310 315 320

Pro Phe Phe Leu Asp Asp Arg Arg Thr Pro Ala Lys Met Cys Leu Asn
 325 330 335

Arg Thr Ser Gln Glu Asn Ile Ser Phe Glu Thr Met Tyr Asp Val Leu
 340 345 350

Ser Thr Lys Pro Val Leu Asn Lys Leu Thr Val Tyr Thr Thr Leu Ile
 355 360 365

140

Asp Val Thr Lys Gly Gln Phe Glu Thr Tyr Leu Arg Asp Cys Pro Asp
 370 375 380

Pro Cys Ile Gly Trp
 385

<210> 129
 <211> 360
 <212> PRT
 <213> Homo sapien

<400> 129

Met Leu Ile Asn Ile Leu Asp Val Met Leu Glu Asn Asn Cys Asn Leu
 1 5 10 15

Pro Arg Cys Ser Ala Arg Pro Lys Ala Ala Ser Leu Val Thr Cys Phe
 20 25 30

Ile Leu Ser Leu Glu Ser Pro Gly Trp Gly Arg Lys Pro Pro Pro Ala
 35 40 45

Gly Arg Ser Ser Thr Ala Pro Leu Ala Lys Ala His Thr His Thr Met
 50 55 60

Lys Thr Leu Lys Leu Phe Leu Lys Thr Asn Phe Ser Pro Ile Val Met
 65 70 75 80

Val Leu Tyr Ile Asn Thr Lys Phe Ser Phe Leu Ile Gly Glu Ile Ile
 85 90 95

Ser Phe Asn Ile Phe Tyr Glu Leu Phe Thr Ile Cys Thr Ser Ile Val
 100 105 110

Ala Glu Asp Lys Lys Gly His Leu Ile His Gly Arg Asn Met Asp Phe
 115 120 125

Gly Val Phe Leu Gly Trp Asn Ile Asn Asn Asp Thr Trp Val Ile Thr
 130 135 140

Glu Gln Leu Lys Pro Leu Thr Val Asn Leu Asp Phe Gln Arg Asn Asn
 145 150 155 160

Lys Thr Val Phe Lys Ala Ser Ser Phe Ala Gly Tyr Val Gly Met Leu
 165 170 175

Thr Gly Phe Lys Pro Gly Leu Phe Ser Leu Thr Leu Asn Glu Arg Phe
 180 185 190

141

Ser Ile Asn Gly Gly Tyr Leu Gly Ile Leu Glu Trp Ile Leu Gly Lys
 195 200 205

Lys Asp Ala Met Trp Ile Gly Phe Leu Thr Arg Thr Val Leu Glu Asn
 210 215 220

Ser Thr Ser Tyr Glu Glu Ala Lys Asn Leu Leu Thr Lys Thr Lys Ile
 225 230 235 240

Leu Ala Pro Ala Tyr Phe Ile Leu Gly Gly Asn Gln Ser Gly Glu Gly
 245 250 255

Cys Val Ile Thr Arg Asp Arg Lys Glu Ser Leu Asp Val Tyr Glu Leu
 260 265 270

Asp Ala Lys Gln Gly Arg Trp Tyr Val Val Gln Thr Asn Tyr Asp Arg
 275 280 285

Trp Lys His Pro Phe Phe Leu Asp Asp Arg Arg Thr Pro Ala Lys Met
 290 295 300

Cys Leu Asn Arg Thr Ser Gln Glu Asn Ile Ser Phe Glu Thr Met Tyr
 305 310 315 320

Asp Val Leu Ser Thr Lys Pro Val Leu Asn Lys Leu Thr Val Tyr Thr
 325 330 335

Thr Leu Ile Asp Val Thr Lys Gly Gln Phe Glu Thr Tyr Leu Arg Asp
 340 345 350

Cys Pro Asp Pro Cys Ile Gly Trp
 355 360

<210> 130

<211> 253

<212> PRT

<213> Homo sapien

<400> 130

Met Pro Gly Pro His His His Val Asp His Tyr Tyr His Cys Val Ser
 1 5 10 15

Glu Met Ser Leu Lys His Val Phe Tyr Arg Trp Asn Ile Asn Asn Asp
 20 25 30

142

Thr Trp Val Ile Thr Glu Gln Leu Lys Pro Leu Thr Val Asn Leu Asp
 35 40 45

Phe Gln Arg Asn Asn Lys Thr Val Phe Lys Ala Ser Ser Phe Ala Gly
 50 55 60

Tyr Val Gly Met Leu Thr Gly Phe Lys Pro Gly Leu Phe Ser Leu Thr
 65 70 75 80

Leu Asn Glu Arg Phe Ser Ile Asn Gly Gly Tyr Leu Gly Ile Leu Glu
 85 90 95

Trp Ile Leu Gly Lys Lys Asp Ala Met Trp Ile Gly Phe Leu Thr Arg
 100 105 110

Thr Val Leu Glu Asn Ser Thr Ser Tyr Glu Glu Ala Lys Asn Leu Leu
 115 120 125

Thr Lys Thr Lys Ile Leu Ala Pro Ala Tyr Phe Ile Leu Gly Gly Asn
 130 135 140

Gln Ser Gly Glu Gly Cys Val Ile Thr Arg Asp Arg Lys Glu Ser Leu
 145 150 155 160

Asp Val Tyr Glu Leu Asp Ala Lys Gln Gly Arg Trp Tyr Val Val Gln
 165 170 175

Thr Asn Tyr Asp Arg Trp Lys His Pro Phe Phe Leu Asp Asp Arg Arg
 180 185 190

Thr Pro Ala Lys Met Cys Leu Asn Arg Thr Ser Gln Glu Asn Ile Ser
 195 200 205

Phe Glu Thr Met Tyr Asp Val Leu Ser Thr Lys Pro Val Leu Asn Lys
 210 215 220

Leu Thr Val Tyr Thr Thr Leu Ile Asp Val Thr Lys Gly Gln Phe Glu
 225 230 235 240

Thr Tyr Leu Arg Asp Cys Pro Asp Pro Cys Ile Gly Trp
 245 250

<210> 131

<211> 255

<212> PRT

<213> Homo sapien

143

<400> 131

Met Pro Gly Arg Ser Cys Val Ala Leu Val Leu Leu Ala Ala Ala Val
 1 5 10 15

Ser Cys Ala Val Ala Gln His Ala Pro Pro Trp Thr Glu Asp Cys Arg
 20 25 30

Lys Ser Thr Tyr Pro Pro Ser Gly Pro Thr Tyr Arg Gly Ala Val Pro
 35 40 45

Trp Tyr Thr Ile Asn Leu Asp Leu Pro Pro Tyr Lys Arg Trp His Glu
 50 55 60

Leu Met Leu Asp Lys Ala Pro Val Leu Lys Val Ile Val Asn Ser Leu
 65 70 75 80

Lys Asn Met Ile Asn Thr Phe Val Pro Ser Gly Lys Val Met Gln Val
 85 90 95

Val Asp Glu Lys Leu Pro Gly Leu Leu Gly Asn Phe Pro Gly Pro Phe
 100 105 110

Glu Glu Glu Met Lys Gly Ile Ala Ala Val Thr Asp Ile Pro Leu Gly
 115 120 125

Glu Ile Ile Ser Phe Asn Ile Phe Tyr Glu Leu Phe Thr Ile Cys Thr
 130 135 140

Ser Ile Val Ala Glu Asp Lys Lys Gly His Leu Ile His Gly Arg Asn
 145 150 155 160

Met Asp Phe Gly Val Phe Leu Gly Trp Asn Ile Asn Asn Asp Thr Trp
 165 170 175

Val Ile Thr Glu Gln Leu Lys Pro Leu Thr Val Asn Leu Asp Phe Gln
 180 185 190

Arg Asn Asn Lys Thr Val Phe Lys Ala Ser Ser Phe Ala Gly Tyr Val
 195 200 205

Gly Met Leu Thr Gly Phe Lys Pro Gly Leu Phe Ser Leu Thr Leu Asn
 210 215 220

Glu Arg Phe Ser Ile Asn Gly Gly Tyr Leu Glu Ile Leu Gln Asn Pro
 225 230 235 240

144

Cys Phe Ser His Val Leu Asp Val Leu Phe Cys Leu Leu Leu Leu
 245 250 255

<210> 132
 <211> 256
 <212> PRT
 <213> Homo sapien

<400> 132

Ser Asp Ala Gly Pro Glu Leu Arg Arg Leu Ser Pro Pro Gly Cys Arg
 1 5 10 15

Arg Gln Leu Cys Arg Arg Ala His Ala Pro Pro Trp Thr Glu Asp Cys
 20 25 30

Arg Lys Ser Thr Tyr Pro Pro Ser Gly Pro Thr Tyr Arg Gly Ala Val
 35 40 45

Pro Trp Tyr Thr Ile Asn Leu Asp Leu Pro Pro Tyr Lys Arg Trp His
 50 55 60

Glu Leu Met Leu Asp Lys Ala Pro Val Leu Lys Val Ile Val Asn Ser
 65 70 75 80

Leu Lys Asn Met Ile Asn Thr Phe Val Pro Ser Gly Lys Val Met Gln
 85 90 95

Val Val Asp Glu Lys Leu Pro Gly Leu Leu Gly Asn Phe Pro Gly Pro
 100 105 110

Phe Glu Glu Glu Met Lys Gly Ile Ala Ala Val Thr Asp Ile Pro Leu
 115 120 125

Gly Glu Ile Ile Ser Phe Asn Ile Phe Tyr Glu Leu Phe Thr Ile Cys
 130 135 140

Thr Ser Ile Val Ala Glu Asp Lys Lys Gly His Leu Ile His Gly Arg
 145 150 155 160

Asn Met Asp Phe Gly Val Phe Leu Gly Trp Asn Ile Asn Asn Asp Thr
 165 170 175

Trp Val Ile Thr Glu Gln Leu Lys Pro Leu Thr Val Asn Leu Asp Phe
 180 185 190

Gln Arg Asn Asn Lys Thr Val Phe Lys Ala Ser Ser Phe Ala Gly Tyr

145

195 200 205

Val Gly Met Leu Thr Gly Phe Lys Pro Gly Leu Phe Ser Leu Thr Leu
 210 215 220

Asn Glu Arg Phe Ser Ile Asn Gly Gly Tyr Leu Glu Ile Leu Gln Asn
 225 230 235 240

Pro Cys Phe Ser His Val Leu Asp Val Leu Phe Cys Leu Leu Leu Leu
 245 250 255

<210> 133
 <211> 245
 <212> PRT
 <213> Homo sapien

<400> 133

Met Pro Gly Arg Ser Cys Val Ala Leu Val Leu Leu Ala Ala Ala Val
 1 5 10 15

Ser Cys Ala Val Ala Gln His Ala Pro Pro Trp Thr Glu Asp Cys Arg
 20 25 30

Lys Ser Thr Tyr Pro Pro Ser Gly Pro Thr Tyr Arg Gly Ala Val Pro
 35 40 45

Trp Tyr Thr Ile Asn Leu Asp Leu Pro Pro Tyr Lys Arg Trp His Glu
 50 55 60

Leu Met Leu Asp Lys Ala Pro Val Leu Lys Val Ile Val Asn Ser Leu
 65 70 75 80

Lys Asn Met Ile Asn Thr Phe Val Pro Ser Gly Lys Val Met Gln Val
 85 90 95

Val Asp Glu Lys Leu Pro Gly Leu Leu Gly Asn Phe Pro Gly Pro Phe
 100 105 110

Glu Glu Glu Met Lys Gly Ile Ala Ala Val Thr Asp Ile Pro Leu Gly
 115 120 125

Glu Ile Ile Ser Phe Asn Ile Phe Tyr Glu Leu Phe Thr Ile Cys Thr
 130 135 140

Ser Ile Val Ala Glu Asp Lys Lys Gly His Leu Ile His Gly Arg Asn
 145 150 155 160

146

Met Asp Phe Gly Val Phe Leu Gly Trp Asn Ile Asn Asn Asp Thr Trp
 165 170 175

Val Ile Thr Glu Gln Leu Lys Pro Leu Thr Val Asn Leu Asp Phe Gln
 180 185 190

Arg Asn Asn Lys Thr Gly Leu Phe Ser Leu Thr Leu Asn Glu Arg Phe
 195 200 205

Ser Ile Asn Gly Gly Tyr Leu Gly Ile Leu Glu Trp Ile Leu Gly Lys
 210 215 220

Lys Glu Gly Arg Gly Leu Ala Gly Glu His Gly Pro His Val Ile Asn
 225 230 235 240

Pro Pro Val Arg Thr
 245

<210> 134
 <211> 246
 <212> PRT
 <213> Homo sapien

<400> 134

Ser Asp Ala Gly Pro Glu Leu Arg Arg Leu Ser Pro Pro Gly Cys Arg
 1 5 10 15

Arg Gln Leu Cys Arg Arg Ala His Ala Pro Pro Trp Thr Glu Asp Cys
 20 25 30

Arg Lys Ser Thr Tyr Pro Pro Ser Gly Pro Thr Tyr Arg Gly Ala Val
 35 40 45

Pro Trp Tyr Thr Ile Asn Leu Asp Leu Pro Pro Tyr Lys Arg Trp His
 50 55 60

Glu Leu Met Leu Asp Lys Ala Pro Val Leu Lys Val Ile Val Asn Ser
 65 70 75 80

Leu Lys Asn Met Ile Asn Thr Phe Val Pro Ser Gly Lys Val Met Gln
 85 90 95

Val Val Asp Glu Lys Leu Pro Gly Leu Leu Gly Asn Phe Pro Gly Pro
 100 105 110

Phe Glu Glu Glu Met Lys Gly Ile Ala Ala Val Thr Asp Ile Pro Leu

147

115		120		125											
Gly	Glu	Ile	Ile	Ser	Phe	Asn	Ile	Phe	Tyr	Glu	Leu	Phe	Thr	Ile	Cys
130						135					140				
Thr	Ser	Ile	Val	Ala	Glu	Asp	Lys	Lys	Gly	His	Leu	Ile	His	Gly	Arg
145					150					155					160
Asn	Met	Asp	Phe	Gly	Val	Phe	Leu	Gly	Trp	Asn	Ile	Asn	Asn	Asp	Thr
				165					170					175	
Trp	Val	Ile	Thr	Glu	Gln	Leu	Lys	Pro	Leu	Thr	Val	Asn	Leu	Asp	Phe
			180					185					190		
Gln	Arg	Asn	Asn	Lys	Thr	Gly	Leu	Phe	Ser	Leu	Thr	Leu	Asn	Glu	Arg
		195					200					205			
Phe	Ser	Ile	Asn	Gly	Gly	Tyr	Leu	Gly	Ile	Leu	Glu	Trp	Ile	Leu	Gly
210						215					220				
Lys	Lys	Glu	Gly	Arg	Gly	Leu	Ala	Gly	Glu	His	Gly	Pro	His	Val	Ile
225					230					235					240
Asn	Pro	Pro	Val	Arg	Thr										
				245											

<210> 135
 <211> 170
 <212> PRT
 <213> Homo sapien
 <400> 135

Met	Pro	Gly	Arg	Ser	Cys	Val	Ala	Leu	Val	Leu	Leu	Ala	Ala	Ala	Val
1				5					10					15	
Ser	Cys	Ala	Val	Ala	Gln	His	Ala	Pro	Pro	Trp	Thr	Glu	Asp	Cys	Arg
			20					25					30		
Lys	Ser	Thr	Tyr	Pro	Pro	Ser	Gly	Pro	Thr	Tyr	Arg	Gly	Ala	Val	Pro
		35					40					45			
Trp	Tyr	Thr	Ile	Asn	Leu	Asp	Leu	Pro	Pro	Tyr	Lys	Arg	Trp	His	Glu
50						55					60				
Leu	Met	Leu	Asp	Lys	Ala	Pro	Val	Leu	Lys	Val	Ile	Val	Asn	Ser	Leu
65					70					75					80

148

Lys Asn Met Ile Asn Thr Phe Val Pro Ser Gly Lys Val Met Gln Val
85 90 95

Val Asp Glu Lys Leu Pro Gly Leu Leu Gly Asn Phe Pro Gly Pro Phe
100 105 110

Glu Glu Glu Met Lys Gly Ile Ala Ala Val Thr Asp Ile Pro Leu Gly
115 120 125

Lys Val His Leu Glu Ala Leu Lys Lys Lys Val Ile Lys Phe Phe Tyr
130 135 140

Lys Phe Pro Leu Arg Cys Asp Ile His Thr Ala Lys Val Leu Tyr Val
145 150 155 160

Leu Arg Tyr Thr Ala Gln Val His Arg Ser
165 170

<210> 136

<211> 171

<212> PRT

<213> Homo sapien

<400> 136

Ser Asp Ala Gly Pro Glu Leu Arg Arg Leu Ser Pro Pro Gly Cys Arg
1 5 10 15

Arg Gln Leu Cys Arg Arg Ala His Ala Pro Pro Trp Thr Glu Asp Cys
20 25 30

Arg Lys Ser Thr Tyr Pro Pro Ser Gly Pro Thr Tyr Arg Gly Ala Val
35 40 45

Pro Trp Tyr Thr Ile Asn Leu Asp Leu Pro Pro Tyr Lys Arg Trp His
50 55 60

Glu Leu Met Leu Asp Lys Ala Pro Val Leu Lys Val Ile Val Asn Ser
65 70 75 80

Leu Lys Asn Met Ile Asn Thr Phe Val Pro Ser Gly Lys Val Met Gln
85 90 95

Val Val Asp Glu Lys Leu Pro Gly Leu Leu Gly Asn Phe Pro Gly Pro
100 105 110

Phe Glu Glu Glu Met Lys Gly Ile Ala Ala Val Thr Asp Ile Pro Leu

149

115					120					125						
Gly	Lys	Val	His	Leu	Glu	Ala	Leu	Lys	Lys	Lys	Val	Ile	Lys	Phe	Phe	
130					135					140						
Tyr	Lys	Phe	Pro	Leu	Arg	Cys	Asp	Ile	His	Thr	Ala	Lys	Val	Leu	Tyr	
145					150					155					160	
Val	Leu	Arg	Tyr	Thr	Ala	Gln	Val	His	Arg	Ser						
165					170											
<210> 137																
<211> 162																
<212> PRT																
<213> Homo sapien																
<400> 137																
Met	Glu	Thr	Asp	Lys	Gln	Glu	Lys	Lys	Glu	Val	Pro	Lys	Cys	Gly	Phe	
1				5				10				15				
Leu	Pro	Gly	Asn	Glu	Lys	Val	Leu	Ser	Leu	Leu	Ala	Leu	Val	Lys	Pro	
20				25				30								
Glu	Val	Trp	Thr	Leu	Lys	Glu	Lys	Cys	Ile	Leu	Val	Ile	Thr	Trp	Ile	
35				40				45								
Gln	His	Leu	Ile	Pro	Lys	Ile	Glu	Asp	Gly	Asn	Asp	Phe	Gly	Val	Ala	
50				55				60								
Ile	Gln	Glu	Lys	Val	Leu	Glu	Arg	Val	Asn	Ala	Val	Lys	Thr	Lys	Val	
65				70				75				80				
Glu	Ala	Phe	Gln	Thr	Thr	Ile	Ser	Lys	Tyr	Phe	Ser	Glu	Arg	Gly	Asp	
85				90				95								
Ala	Val	Ala	Lys	Ala	Ser	Lys	Glu	Thr	His	Val	Met	Asp	Tyr	Arg	Ala	
100				105				110								
Leu	Val	His	Glu	Arg	Asp	Glu	Ala	Ala	Tyr	Gly	Glu	Leu	Arg	Ala	Met	
115				120				125								
Val	Leu	Asp	Leu	Arg	Ala	Phe	Tyr	Ala	Glu	Leu	Tyr	His	Ile	Ile	Ser	
130				135				140								
Ser	Asn	Leu	Glu	Lys	Ile	Val	Asn	Pro	Lys	Gly	Glu	Glu	Lys	Pro	Ser	
145				150				155				160				

150

Met Tyr

<210> 138
 <211> 163
 <212> PRT
 <213> Homo sapien
 <400> 138

Met Arg Lys Gly Leu Asn Pro Leu Phe Leu Thr Val Pro Lys Cys Gly
 1 5 10 15

Phe Leu Pro Gly Asn Glu Lys Val Leu Ser Leu Leu Ala Leu Val Lys
 20 25 30

Pro Glu Val Trp Thr Leu Lys Glu Lys Cys Ile Leu Val Ile Thr Trp
 35 40 45

Ile Gln His Leu Ile Pro Lys Ile Glu Asp Gly Asn Asp Phe Gly Val
 50 55 60

Ala Ile Gln Glu Lys Val Leu Glu Arg Val Asn Ala Val Lys Thr Lys
 65 70 75 80

Val Glu Ala Phe Gln Thr Thr Ile Ser Lys Tyr Phe Ser Glu Arg Gly
 85 90 95

Asp Ala Val Ala Lys Ala Ser Lys Glu Thr His Val Met Asp Tyr Arg
 100 105 110

Ala Leu Val His Glu Arg Asp Glu Ala Ala Tyr Gly Glu Leu Arg Ala
 115 120 125

Met Val Leu Asp Leu Arg Ala Phe Tyr Ala Glu Leu Tyr His Ile Ile
 130 135 140

Ser Ser Asn Leu Glu Lys Ile Val Asn Pro Lys Gly Glu Glu Lys Pro
 145 150 155 160

Ser Met Tyr

<210> 139
 <211> 269
 <212> PRT
 <213> Homo sapien

151

<400> 139

Gly Tyr Tyr Lys Val Leu Gly Lys Gly Lys Leu Pro Lys Gln Pro Val
 1 5 10 15

Ile Val Lys Gly Gln Phe Phe Lys Pro Lys Lys Pro Glu Glu Lys Ile
 20 25 30

Lys Ser Val Gly Val Arg Leu Ser Gly Glu Ala Arg Lys Gln Val Glu
 35 40 45

Val Phe Arg Gln Asn Leu Phe Gln Gly Ala Glu Glu Phe Leu Tyr Arg
 50 55 60

Phe Leu Pro Gln Lys Ile Ile Tyr Leu Asn Gln Leu Leu Gln Glu Asp
 65 70 75 80

Ser Leu Asn Val Ala Asp Leu Thr Ser Leu Arg Ala Pro Leu Asp Ile
 85 90 95

Pro Ile Pro Asp Pro Pro Pro Lys Asp Asp Glu Met Glu Thr Asp Lys
 100 105 110

Gln Glu Lys Lys Glu Val Pro Lys Cys Gly Phe Leu Pro Gly Asn Glu
 115 120 125

Lys Val Leu Ser Leu Leu Ala Leu Val Lys Pro Glu Val Trp Thr Leu
 130 135 140

Lys Glu Lys Cys Ile Leu Val Ile Thr Trp Ile Gln His Leu Ile Pro
 145 150 155 160

Lys Ile Glu Asp Gly Asn Asp Phe Gly Val Ala Ile Gln Glu Lys Val
 165 170 175

Leu Glu Arg Val Asn Ala Val Lys Thr Lys Val Glu Ala Phe Gln Thr
 180 185 190

Thr Ile Ser Lys Tyr Phe Ser Glu Arg Gly Asp Ala Val Ala Lys Ala
 195 200 205

Ser Lys Glu Thr His Val Met Asp Tyr Arg Ala Leu Val His Glu Arg
 210 215 220

Asp Glu Ala Ala Tyr Gly Glu Leu Arg Ala Met Val Leu Asp Leu Arg
 225 230 235 240

Ala Phe Tyr Ala Glu Leu Tyr His Ile Ile Ser Ser Asn Leu Glu Lys
245 250 255

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<210> 140
<211> 229
<212> PRT
<213> Homo sapien
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Ala Gly Lys Pro Ala Asn Arg Trp Arg Ser Ser Gly Arg Ile Phe Ser
1 5 10 15

Leu Asn Gln Leu Leu Gln Glu Asp Ser Leu Asn Val Ala Asp Leu Thr
35 40 45

Ser Leu Arg Ala Pro Leu Asp Ile Pro Ile Pro Asp Pro Pro Pro Lys
50 55 60

Asp Asp Glu Met Glu Thr Asp Lys Gln Glu Lys Lys Glu Val Pro Lys
65 70 75 80

Cys Gly Phe Leu Pro Gly Asn Glu Lys Val Leu Ser Leu Leu Ala Leu
85 90 95

Val Lys Pro Glu Val Trp Thr Leu Lys Glu Lys Cys Ile Leu Val Ile
100 105 110

Thr Trp Ile Gln His Leu Ile Pro Lys Ile Glu Asp Gly Asn Asp Phe
115 120 125

Gly Val Ala Ile Gln Glu Lys Val Leu Glu Arg Val Asn Ala Val Lys
130 135 140

Thr Lys Val Glu Ala Phe Gln Thr Thr Ile Ser Lys Tyr Phe Ser Glu
145 150 155 160

Arg Gly Asp Ala Val Ala Lys Ala Ser Lys Glu Thr His Val Met Asp
165 170 175

Tyr Arg Ala Leu Val His Glu Arg Asp Glu Ala Ala Tyr Gly Glu Leu

153

180 185 190

Arg Ala Met Val Leu Asp Leu Arg Ala Phe Tyr Ala Glu Leu Tyr His
 195 200 205

Ile Ile Ser Ser Asn Leu Glu Lys Ile Val Asn Pro Lys Gly Glu Glu
 210 215 220

Lys Pro Ser Met Tyr
 225

<210> 141
 <211> 253
 <212> PRT
 <213> Homo sapien

<400> 141

Gly Tyr Tyr Lys Val Leu Gly Lys Gly Lys Leu Pro Lys Gln Pro Val
 1 5 10 15

Ile Val Lys Gly Gln Phe Phe Lys Pro Lys Lys Pro Glu Glu Lys Ile
 20 25 30

Lys Ser Val Gly Val Arg Leu Ser Gly Glu Ala Arg Lys Gln Val Glu
 35 40 45

Val Phe Arg Gln Asn Leu Phe Gln Gly Ala Glu Glu Phe Leu Tyr Arg
 50 55 60

Phe Leu Pro Gln Lys Ile Ile Tyr Leu Asn Gln Leu Leu Gln Glu Asp
 65 70 75 80

Ser Leu Asn Val Ala Asp Leu Thr Ser Leu Arg Ala Pro Leu Asp Ile
 85 90 95

Pro Ile Pro Asp Pro Pro Pro Lys Asp Asp Glu Met Glu Thr Asp Lys
 100 105 110

Gln Glu Lys Lys Glu Val Pro Lys Cys Gly Phe Leu Pro Gly Asn Glu
 115 120 125

Lys Val Leu Ser Leu Leu Ala Leu Val Lys Pro Glu Val Trp Thr Leu
 130 135 140

Lys Glu Lys Cys Ile Leu Val Ile Thr Trp Ile Gln His Leu Ile Pro
 145 150 155 160

154

Lys Ile Glu Asp Gly Asn Asp Phe Gly Val Ala Ile Gln Glu Lys Val
 165 170 175

Leu Glu Arg Val Asn Ala Val Lys Thr Lys Val Glu Ala Phe Gln Thr
 180 185 190

Thr Ile Ser Lys Tyr Phe Ser Glu Arg Gly Asp Ala Val Ala Lys Ala
 195 200 205

Ser Lys Glu Thr His Val Met Asp Tyr Arg Ala Leu Val His Glu Arg
 210 215 220

Asp Glu Ala Ala Tyr Gly Glu Leu Arg Ala Met Val Leu Asp Leu Arg
 225 230 235 240

Ala Phe Tyr Gln Pro Gly Glu Asn Cys Gln Pro Lys Gly
 245 250

<210> 142
 <211> 213
 <212> PRT
 <213> Homo sapien

<400> 142

Ala Gly Lys Pro Ala Asn Arg Trp Arg Ser Ser Gly Arg Ile Phe Ser
 1 5 10 15

Arg Ala Glu Glu Phe Leu Tyr Arg Phe Leu Pro Gln Lys Ile Ile Tyr
 20 25 30

Leu Asn Gln Leu Leu Gln Glu Asp Ser Leu Asn Val Ala Asp Leu Thr
 35 40 45

Ser Leu Arg Ala Pro Leu Asp Ile Pro Ile Pro Asp Pro Pro Pro Lys
 50 55 60

Asp Asp Glu Met Glu Thr Asp Lys Gln Glu Lys Lys Glu Val Pro Lys
 65 70 75 80

Cys Gly Phe Leu Pro Gly Asn Glu Lys Val Leu Ser Leu Leu Ala Leu
 85 90 95

Val Lys Pro Glu Val Trp Thr Leu Lys Glu Lys Cys Ile Leu Val Ile
 100 105 110

Thr Trp Ile Gln His Leu Ile Pro Lys Ile Glu Asp Gly Asn Asp Phe

155

115 120 125

Gly Val Ala Ile Gln Glu Lys Val Leu Glu Arg Val Asn Ala Val Lys
 130 135 140

Thr Lys Val Glu Ala Phe Gln Thr Thr Ile Ser Lys Tyr Phe Ser Glu
 145 150 155 160

Arg Gly Asp Ala Val Ala Lys Ala Ser Lys Glu Thr His Val Met Asp
 165 170 175

Tyr Arg Ala Leu Val His Glu Arg Asp Glu Ala Ala Tyr Gly Glu Leu
 180 185 190

Arg Ala Met Val Leu Asp Leu Arg Ala Phe Tyr Gln Pro Gly Glu Asn
 195 200 205

Cys Gln Pro Lys Gly
 210

<210> 143
 <211> 60
 <212> PRT
 <213> Homo sapien

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 <223> X=any amino acid

<400> 143

Met Gly Gly Asn His Phe Ile Leu Lys Lys Asn Phe Phe Phe Leu Phe
 1 5 10 15

Xaa Leu Phe Ile Ser Ser Ser Glu Cys Ser Asp Ile Phe Ser Met Gly
 20 25 30

Ser Lys Val Pro Lys Tyr Met Ile Ala Ser Gly Asn Ile Gly Asp Arg
 35 40 45

Ile Arg Tyr Trp Arg Phe Ser Thr Phe Ile Cys Val
 50 55 60

<210> 144
 <211> 58
 <212> PRT
 <213> Homo sapien

156

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 <223> X=any amino acid

<400> 144

Ser His Ala Gln Asn Val Val Thr Lys Phe Cys Pro Lys Lys Ile Xaa
 1 5 10 15

Pro Gly Leu Ala Thr Ala Ile Arg Arg Arg Thr Val Leu Lys Arg Pro
 20 25 30

Thr Met Gly Gly Asn His Phe Ile Leu Lys Lys Asn Phe Phe Phe Leu
 35 40 45

Phe Xaa Leu Phe Ile Ser Ser Ser Glu Cys
 50 55

<210> 145
 <211> 429
 <212> PRT
 <213> Homo sapien

<400> 145

Met Asn Ser Cys Asp Ser Ala Glu Ala Val Leu Ser Ser Glu Thr Arg
 1 5 10 15

Val Ala Pro Ser Val Leu Arg Leu Ala Met Thr Ser Tyr Ser Tyr Arg
 20 25 30

Gln Ser Ser Ala Thr Ser Ser Phe Gly Gly Leu Gly Gly Gly Ser Val
 35 40 45

Arg Phe Gly Pro Gly Val Ala Phe Arg Ala Pro Ser Ile His Gly Val
 50 55 60

Leu Arg Leu Ala Ala Val Ser Arg Val Leu Arg Pro Ala Leu Cys
 65 70 75 80

Pro Arg Pro Pro Arg Gly Gly Tyr Gly Gly Ala Gly Tyr Gly Trp Arg
 85 90 95

157

Pro Asp Arg Val Arg Arg Ala Ala Gly Gly Gln Arg Glu Ala Asn His
 100 105 110

Ala Glu Pro Gln Arg Pro Pro Gly Leu Leu Pro Gly Gln Gly Ala Arg
 115 120 125

Pro Gly Gly Gly Gln Arg Arg Ala Arg Gly Glu Asp Pro Arg Leu Val
 130 135 140

Pro Glu Ser Arg Gly Pro Gly Pro Ser Arg Asp Tyr Ser His Tyr Tyr
 145 150 155 160

Thr Thr Ile Gln Asp Leu Arg Asp Lys Ile Leu Gly Ala Thr Ile Glu
 165 170 175

Asn Ser Arg Ile Val Leu Gln Ile Asp Asn Ala Arg Leu Ala Ala Asp
 180 185 190

Asp Phe Arg Thr Lys Phe Glu Thr Glu Gln Ala Leu Arg Met Ser Val
 195 200 205

Glu Ala Asp Ile Asn Gly Leu Arg Arg Val Leu Asp Glu Leu Thr Leu
 210 215 220

Ala Arg Thr Asp Leu Glu Met Gln Ile Glu Gly Leu Lys Glu Glu Leu
 225 230 235 240

Ala Tyr Leu Lys Lys Asn His Glu Glu Glu Ile Ser Thr Leu Arg Gly
 245 250 255

Gln Val Gly Gly Gln Val Ser Val Glu Val Asp Ser Ala Pro Gly Thr
 260 265 270

Asp Leu Ala Lys Ile Leu Ser Asp Met Arg Ser Asn Met Arg Ser Trp
 275 280 285

Pro Ser Arg Thr Arg Lys Asp Ala Glu Ala Trp Phe Thr Ser Arg Thr
 290 295 300

Glu Glu Leu Asn Arg Glu Ser Leu Ala His Gly Ala Ala Pro Asp Glu
 305 310 315 320

Thr Gly Pro Glu Val Tyr Val Met His Ala Ser Ala Pro Phe Gln Gly
 325 330 335

Ser Leu Arg Ile Asp Ala Ala Gly His Arg Gln Ser Asp Glu Gln Leu

158

340

345

350

Ser Leu Asp Arg Gln His Cys Gly Arg Asn Arg Arg Ala Arg Leu Gly
 355 360 365

Ala Gln Leu Ala Ala Tyr Pro Gly Ala Asp Gln Leu Val Ile Glu Asp
 370 375 380

Pro Asp Trp Ala Asp Val Arg Ala Asp Ser Glu Arg Gln Asn Gln Glu
 385 390 395 400

Tyr Gln Arg Phe Met Asp Ile Thr Ser Arg Leu Glu Ala Gly Asp Leu
 405 410 415

Pro Thr Tyr Ser Glu Leu Val Glu Gly Arg Glu Asp His
 420 425

<210> 146

<211> 251

<212> PRT

<213> Homo sapien

<400> 146

Leu Pro Thr Ala Ile Ala Ser Arg Arg Pro Arg Arg Pro Ser Glu Ala
 1 5 10 15

Trp Ala Ala Ala Pro Cys Val Leu Gly Arg Gly Ser Leu Phe Ala Arg
 20 25 30

Pro Ala Phe Thr Gly Cys Ser Gly Trp Pro Arg Arg Tyr Pro Val Ser
 35 40 45

Ser Gly Pro Leu Cys Val Leu Val Leu Leu Gly Gly Ala Thr Ala Gly
 50 55 60

Arg Ala Thr Ala Gly Val Leu Thr Cys Val Arg Arg Ala Ala Gly Gly
 65 70 75 80

Gln Arg Glu Ala Asn His Ala Glu Pro Gln Arg Pro Pro Gly Leu Leu
 85 90 95

Pro Gly Gln Gly Ala Arg Pro Gly Gly Gly Gln Arg Arg Ala Arg Gly
 100 105 110

Glu Asp Pro Arg Leu Val Pro Glu Ser Arg Gly Pro Gly Pro Ser Arg
 115 120 125

159

Asp Tyr Ser His Tyr Tyr Thr Thr Ile Gln Asp Leu Arg Asp Lys Ile
 130 135 140

Leu Gly Ala Thr Ile Glu Asn Ser Arg Ile Val Leu Gln Ile Asp Asn
 145 150 155 160

Ala Arg Leu Ala Ala Asp Asp Phe Arg Thr Lys Phe Glu Thr Glu Gln
 165 170 175

Ala Leu Arg Met Ser Val Glu Ala Asp Ile Asn Gly Leu Arg Arg Val
 180 185 190

Leu Asp Glu Leu Thr Leu Ala Arg Thr Asp Leu Glu Met Gln Ile Glu
 195 200 205

Gly Leu Lys Glu Glu Leu Ala Tyr Leu Lys Lys Asn His Glu Glu Glu
 210 215 220

Ile Ser Thr Leu Arg Gly Gln Val Gly Gly Gln Val Ser Val Glu Val
 225 230 235 240

Asp Ser Ala Pro Gly Thr Asp Leu Ala Lys Ile
 245 250

<210> 147
 <211> 175
 <212> PRT
 <213> Homo sapien

<400> 147

Met Pro Gly Arg Ser Cys Val Ala Leu Val Leu Leu Ala Ala Ala Val
 1 5 10 15

Ser Cys Ala Val Ala Gln His Ala Pro Pro Trp Thr Glu Asp Cys Arg
 20 25 30

Lys Ser Thr Tyr Pro Pro Ser Gly Pro Thr Tyr Arg Gly Ala Val Pro
 35 40 45

Trp Tyr Thr Ile Asn Leu Asp Leu Pro Pro Tyr Lys Arg Trp His Glu
 50 55 60

Leu Met Leu Asp Lys Ala Pro Val Leu Lys Val Ile Val Asn Ser Leu
 65 70 75 80

Lys Asn Met Ile Asn Thr Phe Val Pro Ser Gly Lys Ile Met Gln Val

160

85 90 95

Val Asp Glu Lys Leu Pro Gly Leu Leu Gly Asn Phe Pro Gly Pro Phe
 100 105 110

Glu Glu Glu Met Lys Gly Ile Ala Ala Val Thr Asp Ile Pro Leu Gly
 115 120 125

Lys Val His Leu Glu Ala Leu Lys Lys Lys Val Ile Lys Phe Phe Tyr
 130 135 140

Lys Phe Pro Leu Arg Cys Asp Ile His Thr Ala Gln Val Leu Tyr Val
 145 150 155 160

Leu Asp Ile Gln His Arg Cys Thr Gly Leu Arg Tyr Thr Ala Gln
 165 170 175

<210> 148
 <211> 171
 <212> PRT
 <213> Homo sapien

<400> 148

Met Pro Gly Arg Ser Cys Val Ala Leu Val Leu Leu Ala Ala Ala Val
 1 5 10 15

Ser Cys Ala Val Ala Gln His Ala Pro Pro Trp Thr Glu Asp Cys Arg
 20 25 30

Lys Ser Thr Tyr Pro Pro Ser Gly Pro Thr Tyr Arg Gly Ala Val Pro
 35 40 45

Trp Tyr Thr Ile Asn Leu Asp Leu Pro Pro Tyr Lys Arg Trp His Glu
 50 55 60

Leu Met Leu Asp Lys Ala Pro Val Leu Lys Val Ile Val Asn Ser Leu
 65 70 75 80

Lys Asn Met Ile Asn Thr Phe Val Pro Ser Gly Lys Ile Met Gln Val
 85 90 95

Val Asp Glu Lys Leu Pro Gly Leu Leu Gly Asn Phe Pro Gly Pro Phe
 100 105 110

Glu Glu Glu Met Lys Gly Ile Ala Ala Val Thr Asp Ile Pro Leu Gly
 115 120 125

161

Lys Val His Leu Glu Ala Leu Lys Lys Lys Val Ile Lys Phe Phe Tyr
130 135 140

Lys Phe Pro Leu Arg Cys Asp Ile Arg Ala Gln Val Leu Asp Ile Gln
145 150 155 160

Leu Ser Glu Ala Ser Glu Met His Ala Cys Met
165 170

<210> 149
<211> 115
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162

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 <223> X=any amino acid

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 <223> X=any amino acid

<220>
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 <223> X=any amino acid

<400> 149

Met Lys Xaa Xaa Gly Phe Xaa Xaa Leu Pro Xaa Thr His Gly Gln Thr
 1 5 10 15

Xaa Xaa His Arg Xaa Pro Xaa Ala Val Ala Xaa Gly Asp Ile Gly Arg
 20 25 30

Xaa Trp Pro Gly Thr Lys Met Xaa Xaa Lys Met Gly Xaa Ile Tyr Arg
 35 40 45

Thr Glu Tyr Gly Leu Lys Val Trp Arg Ile Asn Xaa Lys His Asn Ile
 50 55 60

Ile Tyr Val Asn Gly Phe Val Pro Xaa Xaa Xaa Xaa Cys Leu Val Xaa
 65 70 75 80

Ile Lys Asp Ser Lys Leu Pro Ala Tyr Lys Asp Leu Gly Lys Asn Leu
 85 90 95

163

Pro Phe Pro Thr Tyr Phe Pro Asp Gly Asp Glu Glu Gly Thr Ala Arg
 100 105 110

Arg Phe Val
 115

<210> 150
 <211> 392
 <212> PRT
 <213> Homo sapien

<400> 150

Met Arg Val Ala Gly Lys Glu Pro Gly Arg Arg Pro Pro Gly Met Ser
 1 5 10 15

Tyr Asp Arg Ala Ile Thr Val Phe Ser Pro Asp Gly His Leu Phe Gln
 20 25 30

Val Glu Tyr Ala Gln Glu Ala Val Lys Lys Gly Ser Thr Ala Val Gly
 35 40 45

Val Arg Gly Arg Asp Ile Val Val Leu Gly Val Glu Lys Lys Ser Val
 50 55 60

Ala Lys Leu Gln Asp Glu Arg Thr Val Arg Lys Ile Cys Ala Leu Asp
 65 70 75 80

Asp Asn Val Cys Met Ala Phe Ala Gly Leu Thr Ala Asp Ala Arg Ile
 85 90 95

Val Ile Asn Arg Ala Arg Val Glu Cys Gln Ser His Arg Leu Thr Cys
 100 105 110

Gly Gly Pro Gly His Cys Gly Val His Gln Pro Cys Tyr Ile Ala Ser
 115 120 125

Leu Lys Gln Arg Tyr Thr Gln Ser Asn Gly Arg Arg Pro Phe Gly Ile
 130 135 140

Ser Ala Leu Ile Val Gly Phe Asp Phe Asp Gly Thr Pro Arg Leu Tyr
 145 150 155 160

Gln Thr Asp Pro Ser Gly Thr Tyr His Ala Trp Lys Ala Asn Ala Ile
 165 170 175

Gly Arg Gly Ala Lys Ser Val Arg Glu Phe Leu Glu Lys Asn Tyr Thr
 180 185 190

164

Asp Glu Ala Ile Glu Thr Asp Asp Leu Thr Ile Lys Leu Val Ile Lys
 195 200 205

Ala Leu Leu Glu Val Val Gln Ser Gly Gly Lys Asn Ile Glu Leu Ala
 210 215 220

Val Met Arg Arg Asp Gln Ser Leu Lys Ile Leu Asn Pro Glu Glu Ile
 225 230 235 240

Glu Lys Tyr Val Ala Glu Ile Asp Thr Glu Asn Lys Lys Asp Thr Glu
 245 250 255

Lys Lys Glu Tyr Lys Lys Lys Ala Ser Trp Met Asn Lys Met Ser Leu
 260 265 270

Leu Cys Asn Phe Ile His Asn Phe Ser Ile Gln Leu Met Asp Glu Ser
 275 280 285

Arg Cys Val Gly Leu Ser Ile Pro Phe Ile His Thr Glu Cys Pro Thr
 290 295 300

Ile Asn Phe Arg Ile Phe Arg Leu Leu Gln Arg Pro Ser Phe Pro Trp
 305 310 315 320

Gly Ala Gly Gly Pro Arg Asn Pro Pro Gly Gly Pro Tyr Leu Ala Gly
 325 330 335

Cys Pro Gly Leu Arg Leu Pro Arg Arg Ala Pro Tyr Gly Ser Ala His
 340 345 350

Leu Ile Pro His Gly Tyr Gly Asp Arg Ala Phe Thr Arg Ser Gly Asp
 355 360 365

Gly Val Thr Ser Leu Ala Arg Asp Leu Cys Glu Gly Pro Leu Ile Arg
 370 375 380

Ala Cys Thr Cys Trp His Met Pro
 385 390

<210> 151
 <211> 252
 <212> PRT
 <213> Homo sapien

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165

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 <223> X=any amino acid

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 <222> (252)..(252)
 <223> X=any amino acid

<400> 151

Ala Thr Thr Ala Pro Ser Pro Ser Ser Arg Pro Thr Ala Thr Ser Ser
 1 5 10 15

Lys Trp Ser Thr Arg Arg Arg Pro Ser Arg Arg Ala Arg Pro Arg Leu
 20 25 30

Val Phe Glu Glu Glu Thr Leu Leu Phe Leu Val Trp Arg Arg Ser Gln
 35 40 45

Trp Pro Asn Cys Arg Met Lys Glu Gln Cys Gly Arg Ser Val Leu Xaa
 50 55 60

Asp Asp Asn Val Cys Met Ala Phe Ala Gly Leu Thr Ala Asp Ala Arg
 65 70 75 80

Ile Val Ile Asn Arg Ala Arg Val Glu Cys Gln Ser His Arg Leu Thr
 85 90 95

Cys Gly Gly Pro Gly His Cys Gly Val His Gln Pro Cys Tyr Ile Ala
 100 105 110

Ser Leu Lys Gln Arg Tyr Thr Gln Ser Asn Gly Arg Arg Pro Phe Gly
 115 120 125

166

Ile Ser Ala Leu Ile Val Gly Phe Asp Phe Asp Gly Thr Pro Arg Leu
 130 135 140

Tyr Gln Thr Asp Pro Ser Gly Thr Tyr His Ala Trp Lys Ala Asn Ala
 145 150 155 160

Ile Gly Arg Gly Ala Lys Ser Val Arg Glu Phe Leu Glu Lys Asn Tyr
 165 170 175

Thr Asp Glu Ala Ile Glu Thr Asp Asp Leu Thr Ile Lys Leu Val Ile
 180 185 190

Lys Ala Leu Leu Glu Val Val Gln Ser Gly Gly Lys Asn Ile Glu Leu
 195 200 205

Ala Val Met Arg Arg Asp Gln Ser Leu Lys Ile Leu Asn Pro Glu Glu
 210 215 220

Ile Glu Lys Tyr Val Ala Glu Ile Asp Thr Glu Asn Lys Xaa Xaa Xaa
 225 230 235 240

Leu Lys Arg Xaa Asn Thr Xaa Arg Lys His His Xaa
 245 250

<210> 152
 <211> 69
 <212> PRT
 <213> Homo sapien

<400> 152

Met Gln Ile Met Tyr Gly Ile Ser Ser Ser Cys Ile Leu Leu Tyr Ile
 1 5 10 15

Asp Ala Gln Gly His Gln Arg Leu Tyr Asn Cys Thr Leu Ala Thr Asn
 20 25 30

Leu Gln Cys Leu Tyr Arg Val Ser Gly Lys Ile Ser Gly Arg Ser Ser
 35 40 45

Asp Arg Tyr Thr Arg Tyr Glu Glu Phe Gln Gln Leu Ser Ala Gly Ile
 50 55 60

Ala Gly Gly Ser Leu
 65

<210> 153

167

<211> 96
<212> PRT
<213> Homo sapien

<400> 153

Val Pro Thr Leu Asp Ile Met Gln Ile Met Tyr Gly Ile Ser Ser Ser
1 5 10 15

Cys Ile Leu Leu Tyr Ile Asp Ala Gln Gly His Gln Arg Leu Tyr Asn
20 25 30

Cys Thr Leu Ala Thr Asn Leu Gln Cys Leu Tyr Arg Val Ser Gly Lys
35 40 45

Ile Ser Gly Arg Ser Ser Glu Asp Thr Arg Ala Met Lys Ser Ser Ser
50 55 60

Ser Leu Ala Gln Ala Ser Arg Glu Asp His Cys Glu Pro His Glu Val
65 70 75 80

Pro Asp Gln Ala Leu Gly Asn Val Val Thr Pro His Phe Tyr Leu Phe
85 90 95

<210> 154
<211> 113
<212> PRT
<213> Homo sapien

<220>
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<223> X=any amino acid

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<223> X=any amino acid

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168

<222> (39)..(40)
 <223> X=any amino acid

<220>
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 <222> (42)..(42)
 <223> X=any amino acid

<220>
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 <223> X=any amino acid

<400> 154

Thr Arg Pro Arg Gly Glu Cys Val Xaa Leu Ser Asp Glu Ala Asp Trp
 1 5 10 15

Asn Val Ser Leu Lys Arg Xaa Ala Ser Thr Gly Val Xaa Leu Asn Gly
 20 25 30

Xaa Arg Glu Ser Ser Phe Xaa Xaa Pro Xaa Thr Ser Lys Gly Val Ala
 35 40 45

Pro Glu Gly Cys His Gly Gly Gly Ala Ala Gly Pro Lys Leu Gly Xaa
 50 55 60

Thr Ser Pro Ala Ser Ala Arg Ser Arg Cys Ser Ala Ala Ala Ser Ala
 65 70 75 80

Lys Gly Ser Gln Phe Cys Thr Thr Xaa His Gly Trp Arg His Glu Phe
 85 90 95

Leu Gly Met Ser Lys Gly Leu Glu Ser Ala Leu Lys Asp Xaa Lys Ile

169

100

105

110

Xaa

<210> 155
 <211> 89
 <212> PRT
 <213> Homo sapien

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 <223> X=any amino acid

<220>
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 <223> X=any amino acid

<400> 155

Val Ser Arg Asp Val Glu Gly Leu Gly Val Ser Leu Glu Gly Pro Gln
 1 5 10 15

Asp Xaa Met Thr Cys Xaa Glu Phe Val Ala Phe Ile Leu Ala Ala Gly
 20 25 30

Glu Ala Gly Arg Gly Val Arg Glu Xaa Asn Gly Cys Phe Ala Glu Cys
 35 40 45

Phe Trp Gly Thr Asn Xaa Xaa Ser His Arg Gly Phe Xaa Leu Lys Lys
 50 55 60

Gly Gly Tyr Arg Trp Gly Ala Phe Leu Thr Tyr Ser Arg Asn Thr Cys

170

65

70

75

80

Leu Phe Leu Glu Cys Phe His Leu Leu
85

<210> 156

<211> 137

<212> PRT

<213> Homo sapien

<220>

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<222> (11)..(11)

<223> X=any amino acid

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<222> (21)..(21)

<223> X=any amino acid

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<222> (36)..(36)

<223> X=any amino acid

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<221> MISC_FEATURE

<222> (108)..(108)

<223> X=any amino acid

<400> 156

Trp Cys Gly Leu Val Gly Lys Thr Phe Glu Xaa Leu Ala Ala Leu Gly
1 5 10 15

Thr Ser Thr Arg Xaa Leu Arg Glu His Gln Lys Gly Arg Pro Thr Ser
20 25 30

Thr Asn Pro Xaa Ala Gln Gln Gln Ser Gln Asp Thr Gly Leu Glu His
35 40 45

Arg Gly Lys Leu Asp Gly Asn Gln Asp Pro Asn Arg Phe Ala Gln Lys
50 55 60

Arg Glu Lys Gly Val Arg Gly Asp Val Cys Val Glu Trp Glu Pro Leu
65 70 75 80

Thr Lys Asp Leu Ala Gly Cys Ile His Gly Leu Ser Asn Val Lys Leu
85 90 95

171

Asn Glu His Phe Leu Asn Thr Thr Asp Phe Pro Xaa His Pro Leu Lys
100 105 110

Glu Gln Pro Trp Thr Glu Pro Trp Ala Gly Ser Arg Gly Arg Arg His
115 120 125

Pro Trp Leu Gln Trp Arg Gly Gln Gly
130 135

<210> 157
<211> 131
<212> PRT
<213> Homo sapien

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<223> X=any amino acid

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<223> X=any amino acid

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<222> (26)..(26)
<223> X=any amino acid

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<223> X=any amino acid

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<223> X=any amino acid

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<223> X=any amino acid

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<220>

172

<221> MISC_FEATURE
 <222> (49)..(49)
 <223> X=any amino acid

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 <222> (51)..(52)
 <223> X=any amino acid

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 <222> (92)..(92)
 <223> X=any amino acid

<220>
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 <223> X=any amino acid

<400> 157

Xaa Val Ala Ala Leu Gly Thr Ser Thr Arg Xaa Leu Arg Glu His Gln
 1 5 10 15

Lys Gly Arg Pro Thr Ser Thr Asn Pro Xaa Ala Gln His Xaa Ala Xaa
 20 25 30

His Trp Leu Glu His Arg Gly Lys Leu Xaa Gly Pro Thr Xaa Xaa Val
 35 40 45

Xaa Pro Xaa Xaa Arg Arg Trp Arg Gly Asp Gly Gly Glu Trp Ser His
 50 55 60

Asp Gln Gly Pro Gly Gly Xaa Xaa Ser Arg Pro Gln Gln Cys Glu Ala
 65 70 75 80

Glu Arg Ala Leu Pro Glu His His Gly Leu Pro Xaa His His Gln Xaa
 85 90 95

Gln Pro Gly Gln Ser Pro Gly Gln Ala Val Gly Gly Gly Ala Thr His
 100 105 110

Gly Cys Ser Gly Gly Ala Arg Ala Glu Pro Ala Gly Pro Pro Glu Arg
 115 120 125

173

Gly Arg Gly
130

<210> 158
<211> 71
<212> PRT
<213> Homo sapien

<400> 158

Met Arg Ser Gln Tyr Glu Val Met Ala Glu Gln Asn Arg Lys Asp Ala
1 5 10 15

Lys Pro Gly Ser Pro Ala Gly Leu Lys Asn Leu Thr Gly Arg Ser Leu
20 25 30

Ala Pro Arg Ser Ser Ser Lys Leu Ala Gly Pro Arg Phe Phe Thr Phe
35 40 45

Gly Ala Pro Phe Arg Val Phe Arg Phe Ser Cys Ser Pro Tyr Asn Asn
50 55 60

Leu Phe Ala Ser Lys Val Leu
65 70

<210> 159
<211> 104
<212> PRT
<213> Homo sapien

<400> 159

Thr Cys Glu Ala Asn Ile Arg Ser Trp Pro Ser Arg Thr Gly Arg Met
1 5 10 15

Leu Lys Pro Gly Ser Pro Ala Gly Leu Lys Asn Leu Thr Gly Arg Ser
20 25 30

Leu Ala Pro Arg Ser Ser Ser Lys Leu Ala Gly Pro Arg Phe Phe Thr
35 40 45

Phe Gly Ala Pro Phe Arg Val Phe Arg Phe Ser Cys Ser Pro Tyr Asn
50 55 60

Asn Leu Phe Ala Ser Lys Val Leu Leu Gly Ser Arg Leu Trp Gly Phe
65 70 75 80

Cys Cys Pro Leu Glu Gly Val Phe Trp Val Lys Gly Trp Glu Gly Arg

174

85

90

95

Asp Pro Tyr Pro Arg Leu Phe Ser
100

<210> 160

<211> 136

<212> PRT

<213> Homo sapien

<400> 160

Met Arg Leu Cys Lys Val Phe Ala Gly Gly Phe Gly Pro Ala Pro Pro
1 5 10 15

Gly His Gln Glu Ser Thr Val Ala Thr Ser Thr Pro Ser Thr Asn Leu
20 25 30

Lys Phe Ala Arg His Cys Gly Ala Arg Gln Cys Ser Pro Ser Trp Glu
35 40 45

Lys Leu Ala Trp Ala Lys Glu Lys Tyr Ser Tyr Trp Gly Ala His Ser
50 55 60

Ala Ile His Leu Gly Arg Gly Val Tyr Leu Gln Pro Leu His Glu Ser
65 70 75 80

Glu Trp Pro Trp Phe Leu Arg Trp Gly Trp Leu Gly Thr Ser Leu Leu
85 90 95

Ala Arg Cys Leu Ala Ser Arg Arg Glu Lys Thr Val Gln Gln His Ala
100 105 110

Gly Glu Thr Asp Pro Val Thr Thr Met Arg Ala Val Arg Arg Glu Lys
115 120 125

Asp Gln Phe Lys Met Pro Arg Asp
130 135

<210> 161

<211> 108

<212> PRT

<213> Homo sapien

<400> 161

Ser Leu Cys Trp Arg Ser Trp Ala Gly Ser Pro Arg Thr Ser Arg Val
1 5 10 15

175

Tyr Cys Gly His Glu Tyr Thr Ile Tyr Asn Leu Lys Phe Ala Arg His
 20 25 30

Cys Gly Ala Arg Gln Cys Ser Pro Ser Trp Glu Lys Leu Ala Trp Ala
 35 40 45

Lys Glu Lys Tyr Ser Tyr Trp Gly Ala His Ser Ala Ile His Leu Gly
 50 55 60

Arg Gly Val Tyr Leu Gln Pro Leu His Glu Ser Glu Trp Pro Trp Leu
 65 70 75 80

Leu Arg Trp Ala Trp Leu Gly Thr Ser Leu Leu Ala Arg Cys Leu Ala
 85 90 95

Ser Arg Gln Gly Glu Asp Gly Ala Ala Ala Arg Arg
 100 105

<210> 162
 <211> 164
 <212> PRT
 <213> Homo sapien

<400> 162

Met Leu Ala Gly Arg Leu Cys Ala Val Arg Leu Ala Val Ser Arg Leu
 1 5 10 15

Ser Gly Thr Gly Val Val Gly Ala Glu Glu Gln Gln Arg Gly Gly
 20 25 30

Gly Ala Cys Val Pro Cys Ala Leu Glu Arg Thr Ala Ala Met Ala Tyr
 35 40 45

Ala Tyr Leu Phe Lys Tyr Ile Ile Ile Gly Asp Thr Gly Val Gly Lys
 50 55 60

Ser Cys Leu Leu Leu Gln Phe Thr Asp Lys Arg Phe Gln Pro Val His
 65 70 75 80

Asp Leu Thr Ile Gly Val Glu Phe Gly Ala Arg Met Ile Thr Ile Asp
 85 90 95

Gly Lys Gln Ile Lys Leu Gln Ile Trp Asp Thr Ala Gly Gln Glu Ser
 100 105 110

Phe Arg Ser Ile Thr Arg Ser Tyr Tyr Arg Gly Ala Ala Gly Ala Leu
 115 120 125

176

Leu Val Tyr Asp Ile Thr Arg Arg Asp Thr Phe Asn His Leu Thr Thr
 130 135 140

Trp Leu Glu Asp Ala Arg Gln His Ser Asn Ser Asn Met Val Ile Met
 145 150 155 160

Leu Ile Gly Lys

<210> 163
 <211> 212
 <212> PRT
 <213> Homo sapien

<220>
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 <223> X=any amino acid

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 <223> X=any amino acid

<400> 163

Arg Gly Glu Ala Gly Arg Arg Arg Arg Gly Gly Cys Tyr Cys Ser Ala
 1 5 10 15

Gly Leu Gly Arg Ala Leu Ser Pro Ser Ala Leu Arg Val Ser Val Arg
 20 25 30

Pro Ala Ser Ser Gln Pro Leu Thr Pro Ala Cys Xaa Xaa Asp Ser Ser
 35 40 45

Xaa Xaa Ala Gly Xaa Leu Cys Ala Val Arg Leu Xaa Val Ser Arg Leu
 50 55 60

177

Ser Gly Thr Gly Val Val Gly Ala Glu Glu Glu Gln Gln Arg Gly Gly
65 70 75 80

Gly Ala Cys Val Pro Cys Ala Leu Glu Arg Thr Ala Ala Met Ala Tyr
85 90 95

Ala Tyr Leu Phe Lys Tyr Ile Ile Ile Gly Asp Thr Gly Val Gly Lys
100 105 110

Ser Cys Leu Leu Leu Gln Phe Thr Asp Lys Arg Phe Gln Pro Val His
115 120 125

Asp Leu Thr Ile Gly Val Glu Phe Gly Ala Arg Met Ile Thr Ile Asp
130 135 140

Gly Lys Gln Ile Lys Leu Gln Ile Trp Asp Thr Ala Gly Gln Glu Ser
145 150 155 160

Phe Arg Ser Ile Thr Arg Ser Tyr Tyr Arg Gly Ala Ala Gly Ala Leu
165 170 175

Leu Val Tyr Asp Ile Thr Arg Arg Asp Thr Phe Asn His Leu Thr Thr
180 185 190

Trp Leu Glu Asp Ala Arg Gln His Ser Asn Ser Asn Met Val Ile Met
195 200 205

Leu Ile Gly Lys
210

<210> 164

<211> 97

<212> PRT

<213> Homo sapien

<400> 164

Met Phe Met Ser Asp Leu Ser Thr Arg Gly Val Val Trp Ala Ser Pro
1 5 10 15

Ile Ile Lys Phe Arg Pro Gly Ser Val Val Val Gln Leu Thr Leu Ala
20 25 30

Phe Arg Glu Gly Thr Ile Asn Val His Asp Val Glu Thr Gln Phe Asn
35 40 45

Gln Tyr Lys Thr Asp Ala Ala Ser Arg Tyr Asn Leu Thr Ile Ser Asp
50 55 60

178

Val Ser Val Ser Asp Val Pro Phe Pro Phe Ser Ala Gln Ser Gly Ala
65 70 75 80

Gly Val Pro Gly Trp Gly Ile Gly Leu Leu Ser Leu Val Ile Ala Gly
85 90 95

Ala

<210> 165
<211> 54
<212> PRT
<213> Homo sapien

<400> 165

Arg Arg Arg Ala Gly Gln Gly Leu Ser Gly Gly Ser Leu Ser Ser Leu
1 5 10 15

Glu Ser Ala Thr Thr Asp Ser Asp Leu Asp Tyr Asp Tyr Leu Gln Asn
20 25 30

Trp Gly Pro Arg Phe Lys Lys Leu Ala Asp Cys Met Ser Ser Lys Asp
35 40 45

Thr Cys Glu Asp Asp Ser
50

<210> 166
<211> 73
<212> PRT
<213> Homo sapien

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<223> X=any amino acid

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<220>

179

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 <223> X=any amino acid

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 <222> (49)..(49)
 <223> X=any amino acid

<220>
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 <222> (62)..(62)
 <223> X=any amino acid

<400> 166

Thr Gly Ile Phe Leu Xaa Gln Gly Lys Ala His Leu Lys Gln Ala Lys
 1 5 10 15

Phe Tyr Arg Glu Asp Thr Phe Asn Lys Thr Ala Arg Thr Ser Lys Trp
 20 25 30

Val Asn Xaa Trp Xaa Asn Thr Leu Xaa Leu Thr Lys Arg Ala Asn Met
 35 40 45

Xaa Ser Cys Leu Ser Thr Ser Leu Glu Lys Lys Arg Thr Xaa Trp His
 50 55 60

Thr Lys Tyr Leu Ser Glu Gly Glu Val
 65 70

<210> 167
 <211> 55
 <212> PRT
 <213> Homo sapien

<400> 167

Leu Ser Gly Thr Ala Arg Ile Ser Arg Ser Glu Val Thr Asp Leu Arg
 1 5 10 15

Arg Thr Leu Gln Val Leu Glu Ile Glu Leu Gln Ser Gln Leu Ser Met
 20 25 30

Lys Ala Ala Leu Glu Asp Thr Leu Ala Glu Thr Glu Ala Arg Phe Gly
 35 40 45

Ala Gln Leu Ala His Ile Gln
 50 55

180

<210> 168

<211> 211

<212> PRT

<213> Homo sapien

<400> 168

Met Gly Gln Glu Ser His Ala Ser Arg Ala Ala Ser Ser Pro Ala Ala
 1 5 10 15

Arg Ala Pro Glu Thr Ala Glu Pro Val Arg Pro Ala Pro Pro Pro Thr
 20 25 30

Pro Asp Thr Glu His Pro Val Met Asp Lys Asn Glu Leu Val Gln Lys
 35 40 45

Ala Lys Leu Ala Glu Gln Leu Ser Asp Met Met Thr Cys Ser Leu Leu
 50 55 60

Lys Ser Val Thr Glu Gln Gly Ala Glu Leu Ser Asn Glu Glu Arg Asn
 65 70 75 80

Leu Leu Ser Val Ala Tyr Lys Asn Val Val Gly Ala Arg Arg Ser Ser
 85 90 95

Trp Arg Val Val Ser Ser Ile Glu Gln Lys Thr Glu Gly Ala Glu Lys
 100 105 110

Lys Gln Gln Met Ala Arg Glu Tyr Arg Glu Lys Ile Glu Thr Glu Leu
 115 120 125

Arg Asp Ile Cys Asn Asp Val Leu Ser Leu Leu Glu Lys Phe Leu Ile
 130 135 140

Pro Asn Ala Ser Gln Ala Glu Ser Lys Val Phe Tyr Leu Glu Asn Glu
 145 150 155 160

Lys Glu Ile Thr Thr Val Thr Trp Leu Arg Leu Pro Leu Val Met Thr
 165 170 175

Lys Lys Gly Ile Ser Ile Ser His Lys Lys His Thr Lys Lys Leu Phe
 180 185 190

Asp Ile Ser Thr Thr Glu Met Pro Pro Thr His Pro Ile Arg Leu Gly
 195 200 205

Leu Ala Leu

181

210

<210> 169
<211> 146
<212> PRT
<213> Homo sapien

<220>
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<223> X=any amino acid

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<222> (97)..(97)
<223> X=any amino acid

<220>
<221> MISC_FEATURE
<222> (100)..(101)
<223> X=any amino acid

<400> 169

Trp Arg Leu Arg Ala Arg Thr Arg Ala Pro Pro Leu Ala Leu Gln Arg
1 5 10 15

Gly Arg Ala Gly Arg Ala Pro Gly Ser Gly Gly Tyr Ala Gly Pro Arg
20 25 30

Ile Ala Cys Gly His Gln Ser Thr Val Ala Ile Ala Ala Phe Asp Val
35 40 45

Ile Val Arg Val Xaa Ala Pro Asp Cys Arg Gly Val Val Ile Arg Gln
50 55 60

Glu Thr Xaa Cys Val Cys Arg Thr Arg Leu Val Ala Leu Phe Glu Gln
65 70 75 80

Arg Arg Ser Met Gly Gln Glu Ser His Ala Ser Arg Ala Ala Xaa Arg

182

85 90 95

Xaa Pro Pro Xaa Xaa Arg Leu Leu Ser Pro Ser Val Arg Arg His His
 100 105 110

Pro Leu Arg Asp Thr Glu His Pro Val Met Asp Lys Asn Glu Leu Val
 115 120 125

Gln Lys Ala Lys Leu Ala Glu Gln Leu Ser Asp Met Met Thr Trp Gln
 130 135 140

Pro Ala
 145

<210> 170
 <211> 118
 <212> PRT
 <213> Homo sapien

<400> 170

Met Pro Asp Gly Gln Phe Arg Asp Ile Ser Leu Ser Asp Tyr Lys Glu
 1 5 10 15

Asn Met Leu Cys Ala Ser Leu Pro Ser Gly Leu Gln Arg Leu Met Cys
 20 25 30

Pro Thr Glu Val Ser Ser Leu Ser Val Asp Arg Ala Glu Glu Phe Lys
 35 40 45

Lys Leu Lys Leu Pro Gly Asp Gly Cys Ser Leu Trp Tyr Phe Val Thr
 50 55 60

Ser Val Tyr Leu Val Met Gly Gln Tyr Gln Pro Asp Glu Asp Asn Gly
 65 70 75 80

Gly Leu Gly Pro Met Asn Ile Pro Leu Val Ser Asp Pro Lys Arg Thr
 85 90 95

Ile Ala Gln Asp Tyr Gly Val Leu Lys Ala Asp Glu Gly Ile Ser Phe
 100 105 110

Arg Gly Leu Phe Tyr His
 115

<210> 171
 <211> 89
 <212> PRT

183

<213> Homo sapien

<220>

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<223> X=any amino acid

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<223> X=any amino acid

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<221> MISC_FEATURE

<222> (51)..(51)

<223> X=any amino acid

<400> 171

Leu Gln Arg Leu Met Cys Pro Thr Glu Val Ser Ser Leu Ser Val Asp
1 5 10 15

Arg Ala Glu Glu Phe Lys Lys Leu Lys Leu Pro Gly Asp Gly Cys Ser
20 25 30

Leu Trp Xaa Ser His Phe Cys His Leu Ser Trp Val Asn Thr Pro Xaa
35 40 45

Xaa Thr Xaa Arg Thr Gly Thr His Glu His Pro Leu Val Ser Asp Pro
50 55 60

Lys Arg Thr Ile Ala Gln Asp Tyr Gly Val Leu Lys Ala Asp Glu Gly
65 70 75 80

Ile Ser Phe Arg Gly Leu Phe Tyr His
85

<210> 172

<211> 89

<212> PRT

<213> Homo sapien

<220>

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<222> (35)..(35)

<223> X=any amino acid

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<223> X=any amino acid

184

<220>
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 <222> (51)..(51)
 <223> X=any amino acid

<400> 172

Leu Gln Arg Leu Met Cys Pro Thr Glu Val Ser Ser Leu Ser Val Asp
 1 5 10 15

Arg Ala Glu Glu Phe Lys Lys Leu Lys Leu Pro Gly Asp Gly Cys Ser
 20 25 30

Leu Trp Xaa Ser His Phe Cys His Leu Ser Trp Val Asn Thr Pro Xaa
 35 40 45

Xaa Thr Xaa Arg Thr Gly Thr His Glu His Pro Leu Val Ser Asp Pro
 50 55 60

Lys Arg Thr Ile Ala Gln Asp Tyr Gly Val Leu Lys Ala Asp Glu Gly
 65 70 75 80

Ile Ser Phe Arg Gly Leu Phe Tyr His
 85

<210> 173
 <211> 144
 <212> PRT
 <213> Homo sapien

<400> 173

Ala Gly Arg Leu Ser His Leu Gln Ala Ala Tyr Gly Arg Arg Ala Pro
 1 5 10 15

Ser Val Pro Ser Val Ala Val Trp Pro Glu Trp Val Pro Ser Ser Pro
 20 25 30

Thr Leu Val Leu Ala Gln Thr Leu Trp Gln Asp Val Trp Gly Leu Thr
 35 40 45

Gln Gln Glu Arg Val Gln Ala Gly Gln Ala Val His Leu Asp Pro Gln
 50 55 60

Leu Pro Arg Glu His Pro Thr Leu Cys Gly Val Asp Cys Thr Leu Ser
 65 70 75 80

185

Leu Thr Leu Thr Leu Gln Gly Phe Arg Phe Cys His Arg Lys Arg Pro
85 90 95

Pro Pro Pro Leu Pro Phe Leu Phe Cys Gln Thr Leu Lys Leu Glu Leu
100 105 110

Leu Asn Leu Ser Trp Gly Asn Leu Gln Asn Trp Gly Pro Lys Phe Gly
115 120 125

Val Ser Val Ala Glu Pro Ser Ser Leu Leu Ser Pro Tyr Thr Asp Lys
130 135 140

<210> 174

<211> 154

<212> PRT

<213> Homo sapien

<220>

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<223> X=any amino acid

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<223> X=any amino acid

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<222> (81)..(81)

<223> X=any amino acid

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<222> (84)..(84)

<223> X=any amino acid

<220>

<221> MISC_FEATURE

<222> (86)..(86)

<223> X=any amino acid

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<222> (92)..(97)

<223> X=any amino acid

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<221> MISC_FEATURE

<222> (99)..(99)

<223> X=any amino acid

186

<220>
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 <222> (101)..(104)
 <223> X=any amino acid

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 <222> (106)..(106)
 <223> X=any amino acid

<220>
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 <222> (128)..(128)
 <223> X=any amino acid

<400> 174

Gln Ala Ala Tyr Pro Thr Phe Arg Gln Pro Met Asp Ala Gly Pro His
 1 5 10 15

Leu Ser Pro Arg Ser Pro Cys Gly Gln Ser Gly Ser Arg Arg Pro Gln
 20 25 30

His Ser Cys Ser Leu Arg His Ser Gly Arg Met Ser Gly Ala Ser Pro
 35 40 45

Ala Gly Ala Arg Ala Ser Arg Ala Gly Gly Pro Pro Arg Pro Thr Xaa
 50 55 60

Pro Arg Glu His Pro Thr Leu Val Phe Asp Val Ala Xaa Ser Pro Ser
 65 70 75 80

Xaa Cys Lys Xaa Pro Xaa Cys His Arg Lys Arg Xaa Xaa Xaa Xaa Xaa
 85 90 95

Xaa Phe Xaa Phe Xaa Xaa Xaa Xaa Lys Xaa Glu Leu Leu Asn Leu Ser
 100 105 110

Trp Gly Asn Leu Arg Thr Gly Leu Phe Gly Val Val Glu Pro Leu Xaa
 115 120 125

Cys Phe His His Thr Arg Ile Ser Asn Gln Leu Phe Cys Ile Leu Val
 130 135 140

Phe Ser Phe His Phe Asp Lys Gln Ala Leu
 145 150

187

<210> 175
<211> 37
<212> PRT
<213> Homo sapien

<400> 175

Met Asp Arg Pro Gly Arg Tyr Tyr Ser Ala Ser Asn Gly Glu Pro Asp
1 5 10 15

Glu Asp Ala Tyr Asp Met Arg Lys Ala Leu Ser Arg Asp Thr Glu Lys
20 25 30

Lys Ser Ile Ile Pro
35

<210> 176
<211> 42
<212> PRT
<213> Homo sapien

<400> 176

Ser Gly Ala Ser Val Met Asp Arg Pro Gly Arg Tyr Tyr Ser Ala Ser
1 5 10 15

Asn Gly Glu Pro Asp Glu Asp Ala Tyr Asp Met Arg Lys Ala Leu Ser
20 25 30

Arg Ile Leu Arg Arg Asn Pro Ser Tyr His
35 40

<210> 177
<211> 60
<212> PRT
<213> Homo sapien

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<223> X=any amino acid

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<223> X=any amino acid

<400> 177

Xaa Val Ala Phe Leu Lys Pro Asn Leu Cys Pro Ile Gln Ser Gln Pro
1 5 10 15

188

Cys Thr Asn Tyr Pro Lys Asn Ile Gln Leu Ala Arg Arg Ile Thr Trp
 20 25 30

Arg Thr Cys Leu Arg Ile His Tyr Asp Gly Lys His Phe Ile Leu Lys
 35 40 45

Lys Lys Lys Xaa Asn Phe Ser Ser Ser Cys Tyr Trp
 50 55 60

<210> 178
 <211> 80
 <212> PRT
 <213> Homo sapien

<400> 178

Lys Asn Ala Pro Gly Gly Glu Gln His Gly Val Arg Gly Thr Lys Ile
 1 5 10 15

Pro Arg Ser Gly Ala Ser Arg Gly Thr Asn Ser Glu Asp Ile Ile Lys
 20 25 30

Lys Arg Gly Phe Lys Glu Arg Ala Val Asp Ile Lys Ile Leu Ala Pro
 35 40 45

Arg Arg Gly Gly Met Lys Thr Arg Gln Ala Asp Gly Ala Ser Ile Thr
 50 55 60

Arg Gln Asp Thr Arg Thr Arg Arg Gln Gln Arg Gly Ala Ser Val Arg
 65 70 75 80

<210> 179
 <211> 130
 <212> PRT
 <213> Homo sapien

<400> 179

Asp Gly Ser Ala Ala Arg Gly Arg Trp Leu Ala Ser Ala Ala Arg Gly
 1 5 10 15

Ala Ala Ala Leu Arg Arg Ser Ile Asn Gln Pro Val Ala Phe Val Arg
 20 25 30

Arg Ile Pro Trp Thr Ala Ala Ser Ser Gln Leu Lys Glu His Phe Ala
 35 40 45

Gln Phe Gly His Val Arg Arg Cys Ile Leu Pro Phe Asp Lys Glu Thr
 50 55 60

189

Gly Phe His Arg Gly Leu Gly Trp Val Gln Tyr Phe Phe Arg Arg Arg
65 70 75 80

Thr Ser Gly Met His Tyr Asn Arg Lys Asn His Ile Ile Asp Gly Val
85 90 95

Lys Val Gln Val His Thr Arg Arg Pro Lys Leu Ser Ala Asn Thr Leu
100 105 110

Met Met Lys Lys Glu Lys Asp Phe Leu Arg Thr Ala Ser Leu Phe Asn
115 120 125

Lys Gly
130

<210> 180
<211> 130
<212> PRT
<213> Homo sapien

<220>
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<222> (75)..(75)
<223> X=any amino acid

<400> 180

Asp Gly Ser Ala Ala Arg Gly Arg Trp Leu Ala Ser Ala Ala Arg Gly
1 5 10 15

Ala Ala Ala Leu Arg Arg Ser Ile Asn Gln Pro Val Ala Phe Val Arg
20 25 30

Arg Ile Pro Trp Thr Ala Ala Ser Ser Gln Leu Lys Glu His Phe Ala
35 40 45

Gln Phe Gly His Val Arg Arg Cys Ile Leu Pro Phe Asp Lys Glu Thr
50 55 60

Gly Phe His Arg Gly Leu Gly Trp Val Gln Xaa Phe Phe Arg Arg Arg
65 70 75 80

Thr Ser Gly Met His Tyr Asn Arg Lys Asn His Ile Ile Asp Gly Val
85 90 95

Lys Val Gln Val His Thr Arg Arg Pro Lys Leu Ser Ala Asn Thr Leu
100 105 110

190

Met Met Lys Lys Glu Lys Asp Phe Leu Arg Thr Ala Ser Leu Phe Asn
 115 120 125

Lys Gly
 130

<210> 181
 <211> 130
 <212> PRT
 <213> Homo sapien

<220>
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 <222> (4)..(4)
 <223> X=any amino acid

<400> 181

Arg Asp Ser Xaa Pro Arg Phe Leu Ala Ser Ile Gly Leu His Val Ser
 1 5 10 15

Pro Arg Phe Val Ala Tyr Glu Leu Thr Val Leu Val Phe Leu Thr Leu
 20 25 30

Ser Val Gly Gly Asp Glu Val Ser Pro Gly Gly Ala Gly Pro Val Ser
 35 40 45

His Ser Ala Glu Glu Gln Pro Val His Gln Val Asp Arg Leu Cys Gly
 50 55 60

Ala Cys Pro Gly Gln Arg Val Phe Leu Cys Pro Gly Glu Pro Gly Ala
 65 70 75 80

Lys Ser Gly Arg His Leu Ser Gly Gly Val Pro Pro Tyr Thr Glu Cys
 85 90 95

Asp His Ala Gln Pro Leu Ala Arg Pro Gly Ala Val Glu Ser Cys Asn
 100 105 110

His Glu Val Cys Ala Gln Thr Gly Glu Thr Val Gln Pro Leu Met Ala
 115 120 125

Arg Arg
 130

<210> 182
 <211> 71

191

<212> PRT

<213> Homo sapien

<400> 182

Met Gly Asn Ile Phe Ala Asn Leu Phe Lys Gly Leu Phe Gly Lys Lys
1 5 10 15

Glu Met Arg Ile Leu Met Val Gly Leu Asp Ala Ala Gly Lys Thr Thr
20 25 30

Ile Leu Tyr Lys Leu Lys Leu Gly Glu Ile Val Thr Thr Ile Pro Thr
35 40 45

Ile Gly Phe Asn Val Glu Thr Val Glu Tyr Leu Gly Arg Asp His Ala
50 55 60

Ile His His Thr Gly Ala Ala
65 70

<210> 183

<211> 57

<212> PRT

<213> Homo sapien

<220>

<221> MISC_FEATURE

<222> (1)..(1)

<223> X=any amino acid

<400> 183

Xaa Gly Thr Thr Val Thr Glu Gln Pro Pro Glu Thr Ser Glu Gly Arg
1 5 10 15

Gly Trp Gly Lys Asp Tyr Thr Glu Arg Gln Ala His Val Arg Ala Ile
20 25 30

Leu Val Ser Asn Val Pro Cys Pro Gly Leu Met Leu Ala Thr Leu Cys
35 40 45

Arg Glu Phe Ser Asn Thr Ala Val Ala
50 55

<210> 184

<211> 56

<212> PRT

<213> Homo sapien

<220>

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192

<222> (1)..(1)
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<223> X=any amino acid

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<223> X=any amino acid

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<222> (19)..(21)
<223> X=any amino acid

<220>
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<222> (23)..(23)
<223> X=any amino acid

<220>
<221> MISC_FEATURE
<222> (54)..(54)
<223> X=any amino acid

<220>
<221> MISC_FEATURE
<222> (56)..(56)
<223> X=any amino acid

<400> 184

Xaa Gly Pro Xaa Xaa Gln Asn Xaa His Xaa Xaa Pro Ala Arg Xaa Gly

193

1 5 10 15

Xaa Gly Xaa Xaa Xaa Thr Xaa Arg Gln Ala His Val Arg Ala Ile Leu
20 25 30

Val Ser Asn Val Pro Cys Pro Gly Leu Met Leu Ala Thr Leu Cys Arg
35 40 45

Glu Phe Ser Asn Thr Xaa Val Xaa
50 55

<210> 185
<211> 147
<212> PRT
<213> Homo sapien

<400> 185

Met Phe Leu Thr Arg Ser Glu Tyr Asp Gly Gly Val Asn Thr Phe Ser
1 5 10 15

Pro Glu Gly Arg Leu Phe Gln Val Glu Tyr Ala Ile Glu Ala Ile Lys
20 25 30

Leu Gly Ser Thr Ala Ile Gly Ile Gln Thr Ser Glu Gly Val Cys Leu
35 40 45

Ala Val Glu Lys Arg Ile Thr Ser Pro Leu Met Glu Pro Ser Ser Ile
50 55 60

Glu Lys Ile Val Glu Ile Asp Ala His Ile Gly Cys Ala Met Ser Gly
65 70 75 80

Leu Ile Ala Asp Ala Lys Thr Leu Ile Asp Lys Ala Arg Val Glu Thr
85 90 95

Gln Asn His Trp Phe Thr Tyr Asn Glu Thr Met Thr Val Glu Ser Val
100 105 110

Thr Gln Ala Val Ser Asn Leu Ala Leu Gln Phe Gly Glu Glu Asp Ala
115 120 125

Asp Pro Gly Ala Met Ser Arg Pro Phe Gly Val Ala Leu Leu Phe Gly
130 135 140

Gly Val Asp
145

194

<210> 186
 <211> 118
 <212> PRT
 <213> Homo sapien

<400> 186

Gly Tyr Gln Ala Trp Phe Tyr Ser His Cys Ile Gln Thr Ser Glu Gly
 1 5 10 15

Val Cys Leu Ala Val Glu Lys Arg Ile Thr Ser Pro Leu Met Glu Pro
 20 25 30

Ser Ser Ile Glu Lys Ile Val Glu Ile Asp Ala His Ile Gly Cys Ala
 35 40 45

Met Ser Gly Leu Ile Ala Asp Ala Lys Thr Leu Ile Asp Lys Ala Arg
 50 55 60

Val Glu Thr Gln Asn His Trp Phe Thr Tyr Asn Glu Thr Met Thr Val
 65 70 75 80

Glu Ser Val Thr Gln Ala Val Ser Asn Leu Ala Leu Gln Phe Gly Glu
 85 90 95

Glu Asp Ala Asp Pro Gly Ala Met Ser Arg Pro Phe Gly Val Ala Leu
 100 105 110

Leu Phe Gly Gly Val Asp
 115

<210> 187
 <211> 140
 <212> PRT
 <213> Homo sapien

<400> 187

Met Thr Pro Ser Asp Arg Arg His Ser Tyr Arg Pro Ala Leu Leu Cys
 1 5 10 15

Ala Asp Thr Pro Arg Ile Arg Pro Leu Trp Pro Gly Gly His Ser Phe
 20 25 30

Ala Asp Ser Ile Arg Ala Glu Met Ser Arg Ser Val Ala Leu Ala Val
 35 40 45

Leu Ala Leu Leu Ser Leu Ser Gly Leu Glu Ala Ile Gln Arg Thr Pro
 50 55 60

195

Lys Ile Gln Val Tyr Ser Arg His Pro Ala Glu Asn Gly Lys Ser Asn
65 70 75 80

Phe Leu Asn Cys Tyr Val Ser Gly Phe His Pro Ser Asp Ile Glu Val
85 90 95

Asp Leu Leu Lys Asn Gly Glu Arg Ile Glu Lys Val Glu His Ser Asp
100 105 110

Leu Ser Phe Ser Lys Asp Trp Ser Phe Tyr Leu Leu Tyr Tyr Thr Glu
115 120 125

Phe Thr Pro Thr Glu Val Lys Trp Asp Arg Asp Met
130 135 140

<210> 188
<211> 140
<212> PRT
<213> Homo sapien

<220>
<221> MISC_FEATURE
<222> (1)..(3)
<223> X=any amino acid

<220>
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<222> (12)..(12)
<223> X=any amino acid

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<222> (18)..(18)
<223> X=any amino acid

<220>
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<222> (20)..(21)
<223> X=any amino acid

<220>
<221> MISC_FEATURE
<222> (32)..(32)
<223> X=any amino acid

<400> 188

Xaa Xaa Xaa Pro Trp Ile Asp Ala Ile Val Ser Xaa Ser Ala Pro Leu
1 5 10 15

196

Arg Xaa Tyr Xaa Xaa Ile Arg Pro Leu Trp Pro Gly Gly His Ser Xaa
20 25 30

Ala Asp Ser Ile Arg Ala Glu Met Ser Arg Ser Val Ala Leu Ala Val
35 40 45

Leu Ala Leu Leu Ser Leu Ser Gly Leu Glu Ala Ile Gln Arg Thr Pro
50 55 60

Lys Ile Gln Val Tyr Ser Arg His Pro Ala Glu Asn Gly Lys Ser Asn
65 70 75 80

Phe Leu Asn Cys Tyr Val Ser Gly Phe His Pro Ser Asp Ile Glu Val
85 90 95

Asp Leu Leu Lys Asn Gly Glu Arg Ile Glu Lys Val Glu His Ser Asp
100 105 110

Leu Ser Phe Ser Lys Asp Trp Ser Phe Tyr Leu Leu Tyr Tyr Thr Glu
115 120 125

Phe Thr Pro Thr Glu Val Lys Trp Asp Arg Asp Met
130 135 140

<210> 189

<211> 84

<212> PRT

<213> Homo sapien

<400> 189

Met Glu Gly Ala Glu Thr Leu Gly Trp Ala Ala Arg Leu Gly Gly Cys
1 5 10 15

Gly Leu Ser Ala Gln Gly Leu Gly Gln Ser Trp Leu Gln Glu Ala Gly
20 25 30

Thr Pro Val Val Gly Arg Arg Arg Val Leu Gln Arg Leu Thr Gly Ala
35 40 45

Cys Leu Cys Leu Cys Ser Arg Glu Gly Asp Leu Ser Gly Gln Gly Leu
50 55 60

Ala Ser Ala Leu Pro Glu Val Arg Glu Met Trp Glu Asp Ala Asp Leu
65 70 75 80

197

Trp Gly Pro Arg

<210> 190
 <211> 160
 <212> PRT
 <213> Homo sapien

<400> 190

Met Val Pro Cys Pro Pro Arg Ser Val Leu Ser Gln Ala Arg Val Leu
 1 5 10 15

Pro Glu Gly Gly Gly Gly Pro Asp Asp Leu Ser Trp Ala Leu Gly Gln
 20 25 30

Ile Arg Gly Pro Gln Gly Pro Ser Pro Gly Phe Arg Gly Arg Gly Ala
 35 40 45

Arg Gly Gly Val Ser Lys Gly Arg Gly Pro Gly Val Pro Glu Arg Arg
 50 55 60

Gly Pro Gly Arg Ile His Pro Val Ser Arg Leu Gln Pro Val Pro Pro
 65 70 75 80

Gln Pro Leu Pro Pro Ala Pro Asp Pro Glu Pro Pro Cys Pro Ser Val
 85 90 95

Pro Ser Ala Thr Arg Arg Cys Thr Ser Asp Trp His Arg Pro Cys Leu
 100 105 110

Lys Cys Glu Lys Cys Gly Lys Thr Leu Thr Ser Gly Gly His Ala Glu
 115 120 125

His Glu Gly Lys Pro Tyr Cys Asn His Pro Cys Tyr Ala Ala Met Phe
 130 135 140

Gly Pro Lys Gly Phe Gly Arg Gly Gly Ala Glu Ser His Thr Phe Lys
 145 150 155 160

<210> 191
 <211> 138
 <212> PRT
 <213> Homo sapien

<400> 191

Met Val Pro Cys Pro Pro Arg Ser Val Leu Ser Gln Ala Arg Val Leu
 1 5 10 15

198

Pro Glu Gly Gly Gly Gly Pro Asp Asp Leu Ser Trp Ala Leu Gly Leu
 20 25 30

Asp Ser Glu Val Pro Arg Val Gln Val Leu Gly Ser Glu Gly Gly Ala
 35 40 45

Arg Gly Ala Val Ser Pro Arg Gly Gly Val Pro Gly Ser Leu Lys Gly
 50 55 60

Ala Asp Gln Ala Gly Ser Thr Gln Ser Arg Ala Cys Ser Pro Cys Arg
 65 70 75 80

Pro Ser Arg Cys Arg Leu His Arg Thr Arg Ser Arg His Ala Gln Val
 85 90 95

Ser Gln Val Gln Gln Gly Gly Val Leu Gln His Glu Gly Lys Pro Tyr
 100 105 110

Cys Asn His Pro Cys Tyr Ala Ala Met Phe Gly Pro Lys Gly Phe Gly
 115 120 125

Arg Gly Gly Ala Glu Ser His Thr Phe Lys
 130 135

<210> 192

<211> 120

<212> PRT

<213> Homo sapien

<400> 192

Lys Ala Arg Thr Arg Pro Asp Pro Pro Ser Leu Ala Pro Ala Ala Arg
 1 5 10 15

Ala Ala Pro Ala Ala Ala Ala Cys Thr Gly Pro Gly Ala Ala Met Pro
 20 25 30

Lys Cys Pro Lys Cys Asn Lys Glu Val Tyr Phe Ser Thr Lys Ala Asn
 35 40 45

Pro Thr Ala Thr Thr Pro Ala Thr Gln Pro Cys Leu Gly Leu Lys Ala
 50 55 60

Leu Gly Gly Ala Glu Pro Arg Ala Thr Leu Ser Ser Lys Pro Gly Gly
 65 70 75 80

Gly Asp Pro Ile Leu Gly Cys Leu Gln Gly His Cys Pro Gly Lys Cys

199

85 90 95

Gln Ala Leu Ser Pro Asp Ala Gln Gly Ser Leu Val Ala Pro Asn Ala
 100 105 110

Leu Ser Lys Pro Glu His Leu Glu
 115 120

<210> 193
 <211> 34
 <212> PRT
 <213> Homo sapien

<400> 193

Arg Lys Lys Ser Asn Thr Gln Trp Pro Leu Gly Thr Tyr His Leu Ser
 1 5 10 15

Ala Pro Gly Tyr Asp Arg Ala Arg Pro Gly Arg Cys Gln Arg Arg Gly
 20 25 30

Phe Cys

<210> 194
 <211> 78
 <212> PRT
 <213> Homo sapien

<220>
 <221> MISC_FEATURE
 <222> (51)..(51)
 <223> X=any amino acid

<220>
 <221> MISC_FEATURE
 <222> (65)..(65)
 <223> X=any amino acid

<400> 194

Thr Gln Thr Lys Met Glu Arg Leu Thr Trp Asp Val Val Arg Thr Glu
 1 5 10 15

Thr Asn Phe Gly Arg Thr Thr Thr Thr Arg Leu Thr Arg Gly Thr His
 20 25 30

Leu Asp Thr Thr Arg Thr Val Pro Gly Pro Ala Thr Glu Asn Glu Leu
 35 40 45

200

Arg Arg Xaa Ile Arg Asp Thr Leu Arg Thr Thr Lys Asn His Thr Phe
 50 55 60

Xaa Arg Asn Asp Thr Lys Arg Leu Thr Phe Lys Pro Glu Lys
 65 70 75

<210> 195

<211> 361

<212> PRT

<213> Homo sapien

<400> 195

Met Ala Ala Glu Gly Trp Ile Trp Arg Trp Gly Trp Gly Arg Arg Cys
 1 5 10 15

Leu Gly Arg Pro Gly Leu Leu Gly Pro Gly Pro Gly Pro Thr Thr Pro
 20 25 30

Leu Phe Leu Leu Leu Leu Leu Leu Gly Ser Val Thr Ala Asp Ile Thr
 35 40 45

Asp Gly Asn Ser Glu His Leu Lys Arg Glu His Ser Leu Ile Lys Pro
 50 55 60

Tyr Gln Gly Val Gly Ser Ser Ser Met Pro Leu Trp Asp Phe Gln Gly
 65 70 75 80

Ser Thr Met Leu Thr Ser Gln Tyr Val Arg Leu Thr Pro Asp Glu Arg
 85 90 95

Ser Lys Glu Gly Ser Ile Trp Asn His Gln Pro Cys Phe Leu Lys Asp
 100 105 110

Trp Glu Met His Val His Phe Lys Val His Gly Thr Gly Lys Lys Asn
 115 120 125

Leu His Gly Asp Gly Ile Ala Leu Trp Tyr Thr Arg Asp Arg Leu Val
 130 135 140

Pro Gly Pro Val Phe Gly Ser Lys Asp Asn Phe His Gly Leu Ala Ile
 145 150 155 160

Phe Leu Asp Thr Tyr Pro Asn Asp Glu Thr Thr Glu Arg Val Phe Pro
 165 170 175

Tyr Ile Ser Val Met Val Asn Asn Gly Ser Leu Ser Tyr Asp His Ser
 180 185 190

201

Lys Asp Gly Arg Trp Thr Glu Leu Ala Gly Cys Thr Ala Asp Phe Arg
 195 200 205

Asn Arg Asp His Asp Thr Phe Leu Ala Val Arg Tyr Ser Arg Gly Arg
 210 215 220

Leu Thr Val Met Thr Asp Leu Glu Asp Lys Asn Glu Trp Lys Asn Cys
 225 230 235 240

Ile Asp Ile Thr Gly Val Arg Leu Pro Thr Gly Tyr Tyr Phe Gly Ala
 245 250 255

Ser Ala Gly Thr Gly Asp Leu Ser Asp Asn His Asp Ile Ile Ser Met
 260 265 270

Lys Ala Val Pro Ala Asp Gly Gly Ala His Ala Arg Arg Gly Glu His
 275 280 285

Arg Leu Asp Gln Asp Arg Ala Gln Arg Gln Leu Pro Gln Val Ala Gln
 290 295 300

Arg Cys Val Cys Thr Ala Pro Pro Cys Leu Gly Leu Gly Gly Leu Thr
 305 310 315 320

Gln Asn Gly Val Lys Pro Ala Trp Arg Val Leu Trp Ser Ser Arg Gly
 325 330 335

Cys Gly Gly Cys Gly Leu Gly Ser Trp Ile Ser Pro Val Leu Ala Ser
 340 345 350

Gly Thr Gly Trp Pro Cys Pro Ser Ser
 355 360

<210> 196

<211> 326

<212> PRT

<213> Homo sapien

<220>

<221> MISC_FEATURE

<222> (313)..(313)

<223> X=any amino acid

<400> 196

Gly Gly Ser Gly Arg Glu Glu Arg Arg Met Ala Ala Glu Gly Trp Ile
 1 5 10 15

202

Trp Arg Trp Gly Trp Gly Arg Arg Cys Leu Gly Arg Pro Gly Leu Leu
 20 25 30

Gly Pro Gly Pro Gly Pro Thr Thr Pro Leu Phe Leu Leu Leu Leu
 35 40 45

Gly Ser Val Thr Ala Asp Ile Thr Asp Gly Asn Ser Glu His Leu Lys
 50 55 60

Arg Glu His Ser Leu Ile Lys Pro Tyr Gln Gly Val Gly Ser Ser Ser
 65 70 75 80

Met Pro Leu Trp Asp Phe Gln Gly Ser Thr Met Leu Thr Ser Gln Tyr
 85 90 95

Val Arg Leu Thr Pro Asp Glu Arg Ser Lys Glu Gly Ser Ile Trp Asn
 100 105 110

His Gln Pro Cys Phe Leu Lys Asp Trp Glu Met His Val His Phe Lys
 115 120 125

Val His Gly Thr Gly Lys Lys Asn Leu His Gly Asp Gly Ile Ala Leu
 130 135 140

Trp Tyr Thr Arg Asp Arg Leu Val Pro Gly Pro Val Phe Gly Ser Lys
 145 150 155 160

Asp Asn Phe His Gly Leu Ala Ile Phe Leu Asp Thr Tyr Pro Asn Asp
 165 170 175

Glu Thr Thr Glu Arg Val Phe Pro Tyr Ile Ser Val Met Val Asn Asn
 180 185 190

Gly Ser Leu Ser Tyr Asp His Ser Lys Asp Gly Arg Trp Thr Glu Leu
 195 200 205

Ala Gly Cys Thr Ala Asp Phe Arg Asn Arg Asp His Asp Thr Phe Leu
 210 215 220

Ala Val Arg Tyr Ser Arg Gly Arg Leu Thr Val Met Thr Asp Leu Glu
 225 230 235 240

Asp Lys Asn Glu Trp Lys Asn Cys Ile Asp Ile Thr Gly Val Arg Leu
 245 250 255

203

Pro Thr Gly Tyr Tyr Phe Gly Ala Ser Ala Gly Thr Gly Asp Leu Ser
 260 265 270

Asp Asn His Asp Ile Ile Ser Met Lys Leu Phe Gln Leu Met Val Glu
 275 280 285

His Thr Pro Asp Glu Glu Ser Ile Asp Trp Thr Lys Ile Glu Pro Ser
 290 295 300

Val Asn Phe Leu Lys Ser Pro Lys Xaa Ala Cys Ala Gln Pro Arg Pro
 305 310 315 320

Ala Trp Ala Trp Ala Ala
 325

<210> 197
 <211> 372
 <212> PRT
 <213> Homo sapien

<400> 197

Met Gly Pro Pro Glu Gly Gly Ser Ser Arg Ala Glu Val Ala Glu Arg
 1 5 10 15

Arg Gly Glu Trp Arg Arg Lys Ala Gly Phe Gly Pro Thr Thr Pro Leu
 20 25 30

Phe Leu Leu Leu Leu Leu Leu Gly Ser Val Thr Ala Asp Ile Thr Asp
 35 40 45

Gly Asn Ser Glu His Leu Lys Arg Glu His Ser Leu Ile Lys Pro Tyr
 50 55 60

Gln Gly Val Gly Ser Ser Ser Met Pro Leu Trp Asp Phe Gln Gly Ser
 65 70 75 80

Thr Met Leu Thr Ser Gln Tyr Val Arg Leu Thr Pro Asp Glu Arg Ser
 85 90 95

Lys Glu Gly Ser Ile Trp Asn His Gln Pro Cys Phe Leu Lys Asp Trp
 100 105 110

Glu Met His Val His Phe Lys Val His Gly Thr Gly Lys Lys Asn Leu
 115 120 125

His Gly Asp Gly Ile Ala Leu Trp Tyr Thr Arg Asp Arg Leu Val Pro

204

130		135		140
Gly Pro Val Phe Gly Ser Lys Asp Asn Phe His Gly Leu Ala Ile Phe				
145		150		155 160
Leu Asp Thr Tyr Pro Asn Asp Glu Thr Thr Glu Arg Val Phe Pro Tyr				
	165		170	175
Ile Ser Val Met Val Asn Asn Gly Ser Leu Ser Tyr Asp His Ser Lys				
	180		185	190
Asp Gly Arg Trp Thr Glu Leu Ala Gly Cys Thr Ala Asp Phe Arg Asn				
	195		200	205
Arg Asp His Asp Thr Phe Leu Ala Val Arg Tyr Ser Arg Gly Arg Leu				
	210		215	220
Thr Val Met Thr Asp Leu Glu Asp Lys Asn Glu Trp Lys Asn Cys Ile				
	225		230	235 240
Asp Ile Thr Gly Val Arg Leu Pro Thr Gly Tyr Tyr Phe Gly Ala Ser				
	245		250	255
Ala Gly Thr Gly Asp Leu Ser Asp Asn His Asp Ile Ile Ser Met Lys				
	260		265	270
Ala Val Pro Ala Asp Gly Gly Ala His Ala Arg Arg Gly Glu His Arg				
	275		280	285
Leu Asp Gln Asp Arg Ala Gln Arg Gln Leu Pro Gln Val Ala Gln Arg				
	290		295	300
Gln Arg Gly Arg Pro His Gly Glu Leu Pro Gln Arg Ala Pro Asp Gly				
	305		310	315 320
Val Ala Gly Val Pro Ala Ala Ala Val Arg Ser Pro Gly His Arg Cys				
	325		330	335
Leu Arg Arg Gly Gly Gly Arg Gly Val Pro Glu Ala Ala Gly Ala Glu				
	340		345	350
Gln Ala Leu Leu Leu Ser Gly Ala Ser Gly Gly Ala Cys Pro Trp Ala				
	355		360	365
Gln Glu Pro Met				
	370			

205

<210> 198

<211> 355

<212> PRT

<213> Homo sapien

<400> 198

Met Gly Pro Pro Glu Gly Gly Ser Ser Arg Ala Glu Val Ala Glu Arg
 1 5 10 15

Arg Gly Glu Trp Arg Arg Lys Ala Gly Phe Gly Pro Thr Thr Pro Leu
 20 25 30

Phe Leu Leu Leu Leu Leu Gly Ser Val Thr Ala Asp Ile Thr Asp Gly
 35 40 45

Asn Ser Glu His Leu Lys Arg Glu His Ser Leu Ile Lys Pro Tyr Gln
 50 55 60

Gly Val Gly Ser Ser Ser Met Pro Leu Trp Asp Phe Gln Gly Ser Thr
 65 70 75 80

Met Leu Thr Ser Gln Tyr Val Arg Leu Thr Pro Asp Glu Arg Ser Lys
 85 90 95

Glu Gly Ser Ile Trp Asn His Gln Pro Cys Phe Leu Lys Asp Trp Glu
 100 105 110

Met His Val His Phe Lys Val His Gly Thr Gly Lys Lys Asn Leu His
 115 120 125

Gly Asp Gly Ile Ala Leu Trp Tyr Thr Arg Asp Arg Leu Val Pro Gly
 130 135 140

Pro Val Phe Gly Ser Lys Asp Asn Phe His Gly Leu Ala Ile Phe Leu
 145 150 155 160

Asp Thr Tyr Pro Asn Asp Glu Thr Thr Glu Arg Val Phe Pro Tyr Ile
 165 170 175

Ser Val Met Val Asn Asn Gly Ser Leu Ser Tyr Asp His Ser Lys Asp
 180 185 190

Gly Arg Trp Thr Glu Leu Ala Gly Cys Thr Ala Asp Phe Arg Asn Arg
 195 200 205

206

Asp His Asp Thr Phe Leu Ala Val Arg Tyr Ser Arg Gly Arg Leu Thr
 210 215 220

Val Met Thr Asp Leu Glu Asp Lys Asn Glu Trp Lys Asn Cys Ile Asp
 225 230 235 240

Ile Thr Gly Val Arg Leu Pro Thr Gly Tyr Tyr Phe Gly Ala Ser Ala
 245 250 255

Gly Thr Gly Asp Leu Ser Asp Asn His Asp Ile Ile Ser Met Lys Leu
 260 265 270

Phe Gln Leu Met Val Glu His Thr Pro Asp Glu Glu Ser Ile Asp Trp
 275 280 285

Thr Lys Ile Glu Pro Ser Val Asn Phe Leu Lys Ser Pro Lys Asp Asn
 290 295 300

Val Asp Asp Pro Thr Gly Asn Phe Arg Ser Gly Pro Leu Thr Gly Trp
 305 310 315 320

Arg Val Phe Leu Leu Leu Leu Cys Ala Leu Leu Gly Ile Val Val Cys
 325 330 335

Ala Val Val Gly Ala Val Val Phe Gln Lys Arg Gln Glu Arg Asn Lys
 340 345 350

Arg Phe Tyr
 355

<210> 199
 <211> 187
 <212> PRT
 <213> Homo sapien

<400> 199

Met Glu Ala Gly Gly Phe Leu Asp Ser Leu Ile Tyr Gly Ala Cys Val
 1 5 10 15

Val Phe Thr Asn Leu Gly Trp Leu Ser Tyr Gly Ala Leu Lys Gly Asp
 20 25 30

Gly Ile Leu Ile Val Val Asn Thr Val Gly Ala Ala Leu Gln Thr Leu
 35 40 45

Tyr Ile Leu Ala Tyr Leu His Tyr Cys Pro Arg Lys Arg Val Val Leu
 50 55 60

207

Leu Gln Thr Ala Thr Leu Leu Gly Val Leu Leu Leu Gly Tyr Gly Tyr
65 70 75 80

Phe Trp Leu Leu Val Pro Asn Pro Glu Ala Arg Leu Gln Gln Leu Gly
85 90 95

Leu Phe Cys Ser Val Phe Thr Ile Ser Met Tyr Leu Ser Pro Leu Ala
100 105 110

Asp Leu Ala Lys Val Ile Gln Thr Lys Ser Thr Gln Cys Leu Ser Tyr
115 120 125

Pro Leu Thr Ile Ala Thr Leu Leu Thr Ser Ala Ser Trp Cys Leu Tyr
130 135 140

Gly Phe Arg Leu Arg Asp Pro Tyr Ile Met Val Ser Asn Phe Pro Gly
145 150 155 160

Ile Val Thr Ser Phe Ile Arg Phe Trp Leu Phe Trp Lys Tyr Pro Gln
165 170 175

Glu Gln Asp Arg Asn Tyr Trp Leu Leu Gln Thr
180 185

<210> 200

<211> 86

<212> PRT

<213> Homo sapien

<400> 200

Ile Gly Phe Glu Arg Arg Pro Gly Arg Tyr Leu Ser Pro Leu Ala Asp
1 5 10 15

Leu Ala Lys Val Ile Gln Thr Lys Ser Thr Gln Cys Leu Ser Tyr Pro
20 25 30

Leu Thr Ile Ala Thr Leu Leu Thr Ser Ala Ser Trp Cys Leu Tyr Gly
35 40 45

Phe Arg Leu Arg Asp Pro Tyr Ile Met Val Ser Asn Phe Pro Gly Ile
50 55 60

Val Thr Ser Phe Ile Arg Phe Trp Leu Phe Trp Lys Tyr Leu Gly Arg
65 70 75 80

208

Asp His Ala Lys Pro Ile
85

<210> 201
<211> 85
<212> PRT
<213> Homo sapien

<400> 201

Arg Phe Glu Arg Arg Pro Gly Arg Tyr Leu Ser Pro Leu Ala Asp Leu
1 5 10 15

Ala Lys Val Ile Gln Thr Lys Ser Thr Gln Cys Leu Ser Tyr Pro Leu
20 25 30

Thr Ile Ala Thr Leu Leu Thr Ser Ala Ser Trp Cys Leu Tyr Gly Phe
35 40 45

Arg Leu Arg Asp Pro Tyr Ile Met Val Ser Asn Phe Pro Gly Ile Val
50 55 60

Thr Ser Phe Ile Arg Phe Trp Leu Phe Trp Lys Tyr Leu Gly Arg Asp
65 70 75 80

His Ala Lys Pro Ile
85

<210> 202
<211> 147
<212> PRT
<213> Homo sapien

<400> 202

Met Lys Gly Glu Val Tyr Pro Phe Gly Ile Val Gly Met Ala Asn Lys
1 5 10 15

Gly Asp Cys Cys Lys Ser Thr Gly Gly Lys Ala Pro Arg Lys Gln Leu
20 25 30

Ala Thr Lys Ala Ala Arg Lys Ser Ala Pro Ser Thr Gly Gly Val Lys
35 40 45

Lys Pro His Arg Tyr Arg Pro Gly Thr Val Ala Leu Arg Glu Ile Arg
50 55 60

Arg Tyr Gln Lys Ser Thr Glu Leu Leu Ile Arg Lys Leu Pro Phe Gln
65 70 75 80

209

Arg Leu Val Arg Glu Ile Ala Gln Asp Phe Lys Thr Asp Leu Arg Phe
85 90 95

Gln Ser Ala Ala Ile Gly Ala Leu Gln Glu Ala Ser Glu Ala Tyr Leu
100 105 110

Val Gly Leu Phe Glu Asp Thr Asn Leu Cys Ala Ile His Ala Lys Arg
115 120 125

Val Thr Ile Met Pro Lys Asp Ile Gln Leu Ala Arg Arg Ile Arg Gly
130 135 140

Glu Arg Ala
145

<210> 203
<211> 146
<212> PRT
<213> Homo sapien

<400> 203

Lys Val Arg Ser Ile His Leu Ala Ser Leu Gly Trp Pro Thr Lys Gly
1 5 10 15

Ile Ala Cys Lys Ser Thr Gly Gly Lys Ala Pro Arg Lys Gln Leu Ala
20 25 30

Thr Lys Ala Ala Arg Lys Ser Ala Pro Ser Thr Gly Gly Val Lys Lys
35 40 45

Pro His Arg Tyr Arg Pro Gly Thr Val Ala Leu Arg Glu Ile Arg Arg
50 55 60

Tyr Gln Lys Ser Thr Glu Leu Leu Ile Arg Lys Leu Pro Phe Gln Arg
65 70 75 80

Leu Val Arg Glu Ile Ala Gln Asp Phe Lys Thr Asp Leu Arg Phe Gln
85 90 95

Ser Ala Ala Ile Gly Ala Leu Gln Glu Ala Ser Glu Ala Tyr Leu Val
100 105 110

Gly Leu Phe Glu Asp Thr Asn Leu Cys Ala Ile His Ala Lys Arg Val
115 120 125

Thr Ile Met Pro Lys Asp Ile Gln Leu Ala Arg Arg Ile Arg Gly Glu

210

130

135

140

Arg Ala
145

<210> 204
<211> 91
<212> PRT
<213> Homo sapien

<400> 204

Met Arg Arg Arg Ala Gly Ile Arg Arg Tyr Gln Lys Ser Thr Glu Leu
1 5 10 15

Leu Ile Arg Lys Leu Pro Phe Gln Arg Leu Val Arg Glu Ile Ala Gln
20 25 30

Asp Phe Lys Thr Asp Leu Arg Phe Gln Ser Ala Ala Ile Gly Ala Leu
35 40 45

Gln Glu Ala Ser Glu Ala Tyr Leu Val Gly Leu Phe Glu Asp Thr Asn
50 55 60

Leu Cys Ala Ile His Ala Lys Arg Val Thr Ile Met Pro Lys Asp Ile
65 70 75 80

Gln Leu Ala Arg Arg Ile Arg Gly Glu Arg Ala
85 90

<210> 205
<211> 116
<212> PRT
<213> Homo sapien

<400> 205

Met Leu Glu Arg Arg Ser Val Met Asp Arg Pro Pro Gly Gln Val Val
1 5 10 15

Arg Pro Asn Asp Glu Val Thr Ala Val Leu Ala Val Gln Thr Glu Leu
20 25 30

Lys Glu Cys Met Val Val Lys Thr Tyr Leu Ile Ser Ser Ile Pro Leu
35 40 45

Gln Gly Ala Phe Asn Tyr Lys Tyr Thr Ala Cys Leu Cys Asp Asp Asn
50 55 60

211

Pro Lys Thr Phe Tyr Trp Asp Phe Tyr Thr Asn Arg Thr Val Gln Ile
65 70 75 80

Ala Ala Val Val Asp Val Ile Arg Glu Leu Gly Ile Cys Pro Asp Asp
85 90 95

Ala Ala Val Ile Pro Ile Lys Asn Asn Arg Phe Tyr Thr Ile Glu Ile
100 105 110

Leu Lys Val Glu
115

<210> 206

<211> 117

<212> PRT

<213> Homo sapien

<400> 206

Asp Ala Met Leu Glu Arg Arg Ser Val Met Asp Pro Pro Gly Gln Val
1 5 10 15

Val Arg Pro Asn Asp Glu Val Thr Ala Val Leu Ala Val Gln Thr Glu
20 25 30

Leu Lys Glu Cys Met Val Val Lys Thr Tyr Leu Ile Ser Ser Ile Pro
35 40 45

Leu Gln Gly Ala Phe Asn Tyr Lys Tyr Thr Ala Cys Leu Cys Asp Asp
50 55 60

Asn Pro Lys Thr Phe Tyr Trp Asp Phe Tyr Thr Asn Arg Thr Val Gln
65 70 75 80

Ile Ala Ala Val Val Asp Val Ile Arg Glu Leu Gly Ile Cys Pro Asp
85 90 95

Asp Ala Ala Val Ile Pro Ile Lys Asn Asn Arg Phe Tyr Thr Ile Glu
100 105 110

Ile Leu Lys Val Glu
115

<210> 207

<211> 168

<212> PRT

<213> Homo sapien

<400> 207

212

Met Leu Glu Arg Arg Ser Val Met Asp Arg Pro Pro Gly Gln Val Leu
 1 5 10 15

Pro Ser Val Phe Ser Ser Met Arg Leu Leu Gln Leu Leu Phe Arg Ala
 20 25 30

Ser Pro Ala Thr Leu Leu Leu Val Leu Cys Leu Gln Leu Gly Ala Asn
 35 40 45

Lys Ala Gln Asp Asn Thr Arg Lys Ile Ile Ile Lys Asn Phe Asp Ile
 50 55 60

Pro Lys Ser Val Arg Pro Asn Asp Glu Val Thr Ala Val Leu Ala Val
 65 70 75 80

Gln Thr Glu Leu Lys Glu Cys Met Val Val Lys Thr Tyr Leu Ile Ser
 85 90 95

Ser Ile Pro Leu Gln Gly Ala Phe Asn Tyr Lys Tyr Thr Ala Cys Leu
 100 105 110

Cys Asp Asp Asn Pro Lys Thr Phe Tyr Trp Asp Phe Tyr Thr Asn Arg
 115 120 125

Thr Val Gln Ile Ala Ala Val Val Asp Val Ile Arg Glu Leu Gly Ile
 130 135 140

Cys Pro Asp Asp Ala Ala Val Ile Pro Ile Lys Asn Asn Arg Phe Tyr
 145 150 155 160

Thr Ile Glu Ile Leu Lys Val Glu
 165

<210> 208
 <211> 160
 <212> PRT
 <213> Homo sapien

<400> 208

Trp Ile Arg Pro Gly Arg Tyr Cys Leu Leu Phe Ser Pro Ala Cys Ala
 1 5 10 15

Cys Ser Ser Ser Cys Ser Gly Pro Ala Leu Pro Pro Cys Ser Trp Phe
 20 25 30

Ser Ala Cys Ser Trp Gly Pro Thr Lys Leu Arg Thr Thr Leu Gly Lys

213

35

40

45

Ile Ile Ile Lys Asn Phe Asp Ile Pro Lys Ser Val Arg Pro Asn Asp
 50 55 60

Glu Val Thr Ala Val Leu Ala Val Gln Thr Glu Leu Lys Glu Cys Met
 65 70 75 80

Val Val Lys Thr Tyr Leu Ile Ser Ser Ile Pro Leu Gln Gly Ala Phe
 85 90 95

Asn Tyr Lys Tyr Thr Ala Cys Leu Cys Asp Asp Asn Pro Lys Thr Phe
 100 105 110

Tyr Trp Asp Phe Tyr Thr Asn Arg Thr Val Gln Ile Ala Ala Val Val
 115 120 125

Asp Val Ile Arg Glu Leu Gly Ile Cys Pro Asp Asp Ala Ala Val Ile
 130 135 140

Pro Ile Lys Asn Asn Arg Phe Tyr Thr Ile Glu Ile Leu Lys Val Glu
 145 150 155 160

<210> 209

<211> 68

<212> PRT

<213> Homo sapien

<400> 209

Met Gly Leu Gly Leu Gly Pro Arg Arg Arg Arg Ser Ser Leu Ser Gly
 1 5 10 15

Cys Arg Gly Ser Gly Arg Ala Arg Val Gly Val Ala Pro Leu Ser Thr
 20 25 30

Pro Val Pro Phe Val Ala Ala Ala Leu Val Arg Asp Thr Ala Phe Arg
 35 40 45

Ser Arg Ala Leu Gly Gly Val Lys Cys Asp Ala Ser Ile Ile His Leu
 50 55 60

Asp Ala Val Ser
 65

<210> 210

<211> 86

<212> PRT

214

<213> Homo sapien

<400> 210

Ala Pro Ala Arg Ala Arg Pro Ser Gly Arg Ala Val Arg Pro Ser Ser
 1 5 10 15

Arg Val Pro Ser Trp Ala Glu Arg Thr Arg Arg Cys Pro Ala Pro Asp
 20 25 30

Gln Thr Ser Arg Gly Leu Gly Pro Gly Pro Arg Ala Ala Ser Ala Pro
 35 40 45

Val Glu Pro Leu Arg Val Ser Gly Phe Gly Ala Gly Ala Arg Gly Arg
 50 55 60

Gly Ser Ser Val His Ala Cys Ser Leu Arg Arg Arg Gly Ser Arg Pro
 65 70 75 80

Gly His Gly Phe Pro Glu
 85

<210> 211

<211> 727

<212> PRT

<213> Homo sapien

<400> 211

Met Leu Met Tyr His Phe Pro Gln Pro Gln Ala Lys Phe Asp Trp Leu
 1 5 10 15

Lys Asn Ile Cys Pro Leu Asn Tyr Ile Trp Gly Gly Ile Tyr Asn Lys
 20 25 30

Thr Met Lys Asp Phe Met Val Ser Ser Tyr Ile Ile Arg Lys Leu Val
 35 40 45

Arg Asn Val Ala Glu Asn Gln Phe Leu Ser Leu Lys Glu Leu Val Tyr
 50 55 60

Ile Tyr Lys Gln Lys Leu Gln Glu Lys Asp Ser Leu Ile Phe Lys Ser
 65 70 75 80

Asn Ser Ile Phe Gly Tyr His Ser Arg Lys Gly Lys Tyr Thr Asn Phe
 85 90 95

Arg Phe Phe Tyr Leu Cys Leu Ser Arg Gly Cys Lys Gln Leu Lys Glu
 100 105 110

215

Val Ile Lys Met Lys Ser Ser Lys Lys Trp Leu Leu Ile Thr Trp Lys
 115 120 125

Ala Val Tyr Ile Cys Lys Lys Ile Gln Tyr Tyr Asp Leu His Gln Leu
 130 135 140

Leu His Ile Ile Tyr Leu Gly Tyr Tyr Leu Trp Tyr Ser Leu Cys Met
 145 150 155 160

Glu Cys Lys Gly Ile Phe Lys Leu Thr Arg Ser Cys Trp Ser Ser Tyr
 165 170 175

Asn Met Leu Gln Tyr Tyr Lys Ile Glu Met Lys Tyr Phe Leu Ile Glu
 180 185 190

Gly Lys Tyr Lys Phe Asn Ile Trp Ala Ile Glu Thr Phe Lys Leu Tyr
 195 200 205

Phe Lys Ser Met Ile Leu Met Tyr Met Ile Leu Phe Cys Leu Cys Tyr
 210 215 220

Ile Asn Arg Ile Arg Gly Val Phe Cys Asn Ser Asn Thr Leu Tyr Ile
 225 230 235 240

Pro Asn Phe Ile Leu Tyr Glu Trp Thr Phe Lys Ile Lys Gly Ile Cys
 245 250 255

Ala Ser Arg Gly Pro Asn Leu Asn His Glu Leu Ile Cys Gln Ala Ser
 260 265 270

Asp Tyr Arg Lys Ala Ser Leu Ile Asn Leu Glu Leu Gly Lys Gly Ala
 275 280 285

Gly Lys Thr Val Phe Cys Arg Asn Leu Leu Val Gln Gln Pro Phe Lys
 290 295 300

Leu Asn Val Cys Glu His Asn Ser Asp Gly Ile Phe Ser Ser Pro Ser
 305 310 315 320

Leu Trp Phe Val Gln Leu Asp Val Thr Val Ala Val Ala Leu Thr Val
 325 330 335

Lys Cys Leu Asn Asp Asp Thr Ile Met Trp Ser Asp Phe Glu Met Arg
 340 345 350

216

Asp Ser Ser Gln Glu Leu Ser Ser Ala Pro Ile Ser Phe Lys Ser Tyr
 355 360 365

Ser Leu Ala Val Gln Ile Met Ile Asp Leu Phe Val Thr Asp Cys Arg
 370 375 380

Lys Gln Ser Leu Ile Phe Gln Tyr Phe Thr Leu Lys Leu Phe Thr Val
 385 390 395 400

Val Thr Met Gly Arg Tyr Phe His Gly Leu Ser Ala Pro Glu Arg Leu
 405 410 415

Gly Glu Tyr Ser Leu Leu Ser Asp Lys Thr Asn Tyr Leu Tyr Met Ser
 420 425 430

Ala Val Ala Glu Gly Tyr Thr Phe Ile Leu Lys Tyr Val Asn Asn Pro
 435 440 445

Ser Asp Tyr Thr Asn Ile Asp Leu Ala Ile Met Lys Pro Glu Tyr Arg
 450 455 460

Glu Asn Glu Leu Phe Gln Gly Gly Met Val Lys Ser Phe Phe Leu Ala
 465 470 475 480

Gly Cys Lys Lys Leu Leu Ile Leu Phe Ser Gln Leu Val Gly Ile Tyr
 485 490 495

Glu Phe Tyr Lys Gln Thr Ile Arg Asn Asp Ser Val Val Ser Asp Lys
 500 505 510

Gln His Pro Asn Ile Leu Thr Leu Leu Leu Val Val Phe Phe Lys Ser
 515 520 525

Tyr Leu Ser Leu Thr Phe Ser His Arg Ile Ala Thr Asp Leu Met Arg
 530 535 540

Ser Leu Thr Asp Leu Ile Phe Leu Gln Phe Gln Tyr Ile Phe Ala Leu
 545 550 555 560

Glu Ser Pro Val Met Asn Ile Lys Ile Tyr Val Gln Ser Phe Val Asp
 565 570 575

Asp Ile Asn Tyr Ile Lys Thr Phe Gln Met Gly Tyr Cys Ser Ile Glu
 580 585 590

217

Cys Ala Val Phe Tyr Gly Arg Ile Ile Leu Ser Leu Trp Thr Ser Arg
 595 600 605

Leu Leu Ser Val Gly Met Lys Ile Asn Leu Leu Gln Ser Asp Phe Leu
 610 615 620

Gly Ile Asn Ala Val Phe Ile Phe Val Arg Leu Leu Pro Ser Phe Asn
 625 630 635 640

Val Ile Leu Asn Phe Leu Trp Ile Tyr Phe Pro Ile His Lys Ile Leu
 645 650 655

Gln Asn Lys Asn Asp Asn Asn Phe Tyr Thr Phe Tyr Lys Asn Lys Phe
 660 665 670

Ile Phe Ser Pro Ser Arg Cys Leu Lys Ile Leu Cys Leu Gly Ile Ser
 675 680 685

Ile Ser Asn Leu Met Lys Glu Asn Arg Ile Asn Asn Ala Gly Asn Ser
 690 695 700

Arg Lys Val Ser Ile Leu Ile Arg Cys Gln Thr Asp Ile Ser Cys Glu
 705 710 715 720

Pro Asn Ser Phe Tyr Gly Asn
 725

<210> 212

<211> 73

<212> PRT

<213> Homo sapien

<400> 212

Ala Ser Met His Val Phe Ile Phe Val Arg Leu Leu Pro Ser Phe Asn
 1 5 10 15

Val Ile Leu Asn Phe Leu Trp Ile Tyr Phe Pro Ile His Lys Ile Leu
 20 25 30

Gln Asn Lys Asn Asp Asn Asn Phe Tyr Thr Phe Tyr Lys Asn Lys Phe
 35 40 45

Ile Phe Ser Pro Ser Arg Cys Leu Lys Ile Leu Cys Leu Gly Ile Ser
 50 55 60

Ile Ser Asn Leu Ile Arg Lys Ile Gly
 65 70

218

<210> 213
 <211> 73
 <212> PRT
 <213> Homo sapien

<400> 213

Ala Ser Met His Val Phe Ile Phe Val Arg Leu Leu Pro Ser Phe Asn
 1 5 10 15

Val Ile Leu Asn Phe Leu Trp Ile Tyr Phe Pro Ile His Lys Ile Leu
 20 25 30

Gln Asn Lys Asn Asp Asn Asn Phe Tyr Thr Phe Tyr Lys Asn Lys Phe
 35 40 45

Ile Phe Ser Pro Ser Arg Cys Leu Lys Ile Leu Cys Leu Gly Ile Ser
 50 55 60

Ile Ser Asn Leu Ile Arg Lys Ile Gly
 65 70

<210> 214
 <211> 67
 <212> PRT
 <213> Homo sapien

<400> 214

Met Glu Leu Leu Tyr Trp Leu Leu Glu Gly Gly Asp Ser Glu Asp Lys
 1 5 10 15

Glu Asp Ala Thr Gly Asn Val Glu Met Lys Asn Ile Gln Pro Leu Val
 20 25 30

Phe Glu Ile Ser Cys Asp Val Phe Gln Ser Arg Cys Lys Glu His Gly
 35 40 45

Lys Ile Lys Val Leu Glu Trp Phe Lys Tyr Val Leu Gly Ile Pro Val
 50 55 60

Tyr Arg Leu
 65

<210> 215
 <211> 90
 <212> PRT
 <213> Homo sapien

219

<400> 215

Thr Lys Gly Phe Leu Gln Met Leu Ala Glu Ile His Pro Lys Ala Gly
 1 5 10 15

Leu Gln Ser Leu Gln Phe Ile Met Glu Leu Leu Tyr Trp Leu Leu Glu
 20 25 30

Gly Gly Asp Ser Glu Asp Lys Glu Asp Ala Thr Gly Asn Val Glu Met
 35 40 45

Lys Asn Ile Gln Pro Leu Val Phe Glu Ile Ser Cys Asp Val Phe Gln
 50 55 60

Ser Arg Cys Lys Glu His Gly Lys Ile Lys Val Leu Glu Trp Phe Lys
 65 70 75 80

Tyr Val Leu Gly Ile Pro Val Tyr Arg Leu
 85 90

<210> 216

<211> 56

<212> PRT

<213> Homo sapien

<400> 216

Glu Arg Arg Gln Cys Asp Gly Trp Ser Arg Pro Arg Trp Gly Glu Asp
 1 5 10 15

Ser Thr Leu Gly Arg Lys Lys Ser Gln Asn Leu Val Ser Phe Leu Thr
 20 25 30

Leu Arg Ala Lys Leu Met Gly Thr Ser Ser Pro Ser Leu Cys Pro Gln
 35 40 45

Asn Pro Ala Pro Ile Arg Ser Trp
 50 55

<210> 217

<211> 46

<212> PRT

<213> Homo sapien

<400> 217

Trp Met Val Ala Ala Arg Trp Gly Glu Asp Ser Thr Leu Gly Arg Lys
 1 5 10 15

Lys Ser Gln Asn Leu Val Ser Phe Leu Thr Leu Arg Pro Thr His Gly

220

20

25

30

Asp Phe Gln Pro Phe Ser Val Ser Pro Glu Ser Cys Pro His
 35 40 45

<210> 218

<211> 154

<212> PRT

<213> Homo sapien

<400> 218

Tyr Asn Ala Ala Arg Ala Ala Gln Cys Glu Trp Ile Gly Arg Pro Gly
 1 5 10 15

Arg Tyr Gln Leu Cys Gln Pro Gln Ser Lys Asp Gln Val Arg Trp Gln
 20 25 30

Cys Asn Arg Pro Ser Ala Lys His Gly Pro Glu Lys Leu Ser Glu Lys
 35 40 45

Phe Gln Arg Phe Thr Pro Phe Thr Leu Gly Lys Glu Phe Lys Glu Gly
 50 55 60

His Ser Tyr Tyr Tyr Ile Ser Lys Pro Ile His Gln His Glu Asp Arg
 65 70 75 80

Cys Leu Arg Leu Lys Val Thr Val Ser Gly Lys Ile Ile Thr Val Leu
 85 90 95

Arg Pro Met Ser Ile His Arg Arg Arg Asp Leu Gln Gln Met Thr Gln
 100 105 110

Arg Cys Gly Phe Tyr Ile Ala Ser Val Thr Val Leu Pro His Ala Ser
 115 120 125

Ser His Leu Pro Gly Leu Cys Cys Ser Phe His Phe Cys Cys Cys Lys
 130 135 140

Pro Arg Glu Gly Val Cys His Thr Trp Pro
 145 150

<210> 219

<211> 204

<212> PRT

<213> Homo sapien

<400> 219

221

His Arg Ser Gln Cys Cys Pro Thr Pro Leu Pro Thr Cys Leu Asp Cys
 1 5 10 15

Ala Ala Pro Ser Thr Ser Ala Ala Ala Asn Pro Val Lys Val Cys Ala
 20 25 30

Thr Pro Gly Leu Lys Glu Gly Gln Ala Glu Glu Arg Asp Arg His Ser
 35 40 45

Lys Pro Val Leu Gly Pro Leu Ser Glu Pro Pro Ala Leu Gly Thr Thr
 50 55 60

Pro Thr Thr Gly Ile Ser Tyr His Leu Ala Ala Ser Lys Arg Val Asn
 65 70 75 80

Ile Lys Val Phe Asn Arg Lys Glu Ala Asn Gln Pro Asp Ser Ala Ile
 85 90 95

Pro Thr Phe Thr Ser Glu Gly Trp Arg Lys Lys Trp Arg Gln Ser Phe
 100 105 110

Pro Thr Ile Pro Ala Phe Lys Pro Lys Lys Gln Ala Val Gln Ala Trp
 115 120 125

Ser Leu Lys Ala Gln Trp Glu Leu Ser Trp Lys Gly Pro Arg Gly Trp
 130 135 140

Ala Lys Leu Val Lys Asp Ala Pro Ser Arg Arg Glu Pro Gly Cys Pro
 145 150 155 160

Asp Glu Leu Thr Glu Gly Lys Ala Arg Asn Ser Phe Leu Leu Gly Ser
 165 170 175

Gln Val Gln Glu Arg Gln His Ala Trp Ala Asp Pro Ala Ser Pro Ser
 180 185 190

Lys Thr Ser Ser Val Glu Leu Pro Gln Arg Ser Leu
 195 200

<210> 220

<211> 147

<212> PRT

<213> Homo sapien

<400> 220

Met His Ala Arg Ala Ala Pro Gly Gln Glu Tyr Gln Leu Cys Gln Pro
 1 5 10 15

222

Gln Ser Lys Asp Gln Val Arg Trp Gln Cys Asn Arg Pro Ser Ala Lys
20 25 30

His Gly Pro Glu Lys Leu Ser Glu Lys Phe Gln Arg Phe Thr Pro Phe
35 40 45

Thr Leu Gly Lys Glu Phe Lys Glu Gly His Ser Tyr Tyr Tyr Ile Ser
50 55 60

Lys Pro Ile His Gln His Glu Asp Arg Cys Leu Arg Leu Lys Val Thr
65 70 75 80

Val Ser Gly Lys Ile Ile Thr Val Leu Arg Pro Met Ser Ile His Arg
85 90 95

Arg Arg Asp Leu Gln Gln Met Thr Gln Arg Cys Gly Phe Tyr Ile Ala
100 105 110

Ser Val Thr Val Leu Pro His Ala Ser Ser His Leu Pro Gly Leu Cys
115 120 125

Cys Ser Phe His Phe Cys Cys Cys Lys Pro Arg Glu Gly Val Cys His
130 135 140

Thr Trp Pro
145

<210> 221
<211> 204
<212> PRT
<213> Homo sapien

<400> 221

His Arg Ser Gln Cys Cys Pro Thr Pro Leu Pro Thr Cys Leu Asp Cys
1 5 10 15

Ala Ala Pro Ser Thr Ser Ala Ala Ala Asn Pro Val Lys Val Cys Ala
20 25 30

Thr Pro Gly Leu Lys Glu Gly Gln Ala Glu Glu Arg Asp Arg His Ser
35 40 45

Lys Pro Val Leu Gly Pro Leu Ser Glu Pro Pro Ala Leu Gly Thr Thr
50 55 60

223

Pro Thr Thr Gly Ile Ser Tyr His Leu Ala Ala Ser Lys Arg Val Asn
65 70 75 80

Ile Lys Val Phe Asn Arg Lys Glu Ala Asn Gln Pro Asp Ser Ala Ile
85 90 95

Pro Thr Phe Thr Ser Glu Gly Trp Arg Lys Lys Trp Arg Gln Ser Phe
100 105 110

Pro Thr Ile Pro Ala Phe Lys Pro Lys Lys Gln Ala Val Gln Ala Trp
115 120 125

Ser Leu Lys Ala Gln Trp Glu Leu Ser Trp Lys Gly Pro Arg Gly Trp
130 135 140

Ala Lys Leu Val Lys Asp Ala Pro Ser Arg Arg Glu Pro Gly Cys Pro
145 150 155 160

Asp Glu Leu Thr Glu Gly Lys Ala Arg Asn Ser Phe Leu Leu Gly Ser
165 170 175

Gln Val Gln Glu Arg Gln His Ala Trp Ala Asp Pro Ala Ser Pro Ser
180 185 190

Lys Thr Ser Ser Val Glu Leu Pro Gln Arg Ser Leu
195 200

<210> 222

<211> 74

<212> PRT

<213> Homo sapien

<400> 222

Met His Ala Arg Ala Ala Pro Gly Gln Ser Tyr Leu Ile Tyr Tyr His
1 5 10 15

Ser Cys Leu Ser Ala His Ser Pro Gln Ala His Asp Asn Pro Gln Glu
20 25 30

Lys Arg Leu Ala Ala Asp Asp Pro Glu Val Arg Val Leu His Ser Ile
35 40 45

Gly His Ser Ala Ala Pro Arg Leu Phe Pro Leu Ala Trp Thr Val Leu
50 55 60

Leu Leu Pro Leu Leu Leu Leu Gln Thr Pro
65 70

224

<210> 223

<211> 204

<212> PRT

<213> Homo sapien

<400> 223

His Arg Ser Gln Cys Cys Pro Thr Pro Leu Pro Thr Cys Leu Asp Cys
 1 5 10 15

Ala Ala Pro Ser Thr Ser Ala Ala Ala Asn Pro Val Lys Val Cys Ala
 20 25 30

Thr Pro Gly Leu Lys Glu Gly Gln Ala Glu Glu Arg Asp Arg His Ser
 35 40 45

Lys Pro Val Leu Gly Pro Leu Ser Glu Pro Pro Ala Leu Gly Thr Thr
 50 55 60

Pro Thr Thr Gly Ile Ser Tyr His Leu Ala Ala Ser Lys Arg Val Asn
 65 70 75 80

Ile Lys Val Phe Asn Arg Lys Glu Ala Asn Gln Pro Asp Ser Ala Ile
 85 90 95

Pro Thr Phe Thr Ser Glu Gly Trp Arg Lys Lys Trp Arg Gln Ser Phe
 100 105 110

Pro Thr Ile Pro Ala Phe Lys Pro Lys Lys Gln Ala Val Gln Ala Trp
 115 120 125

Ser Leu Lys Ala Gln Trp Glu Leu Ser Trp Lys Gly Pro Arg Gly Trp
 130 135 140

Ala Lys Leu Val Lys Asp Ala Pro Ser Arg Arg Glu Pro Gly Cys Pro
 145 150 155 160

Asp Glu Leu Thr Glu Gly Lys Ala Arg Asn Ser Phe Leu Leu Gly Ser
 165 170 175

Gln Val Gln Glu Arg Gln His Ala Trp Ala Asp Pro Ala Ser Pro Ser
 180 185 190

Lys Thr Ser Ser Val Glu Leu Pro Gln Arg Ser Leu
 195 200

225

<210> 224

<211> 895

<212> PRT

<213> Homo sapien

<400> 224

Met Gly Cys Trp Leu Ser Trp Ser Lys Thr Glu Gly Cys Arg Ala Pro
 1 5 10 15

Gly Val Leu Pro Ile Ser Thr Met Leu Thr Pro Ala Glu Leu Ala Thr
 20 25 30

Val Val Arg Arg Phe Ser Gln Thr Gly Ile Gln Asp Phe Leu Thr Leu
 35 40 45

Thr Leu Thr Glu Pro Thr Gly Leu Leu Tyr Val Gly Ala Arg Glu Ala
 50 55 60

Leu Phe Ala Phe Ser Met Glu Ala Leu Glu Leu Gln Gly Ala Ile Ser
 65 70 75 80

Trp Glu Ala Pro Val Glu Lys Lys Thr Glu Cys Ile Gln Lys Gly Lys
 85 90 95

Asn Asn Gln Thr Glu Cys Phe Asn Phe Ile Arg Phe Leu Gln Pro Tyr
 100 105 110

Asn Ala Ser His Leu Tyr Val Cys Gly Thr Tyr Ala Phe Gln Pro Lys
 115 120 125

Cys Thr Tyr Val Asn Met Leu Thr Phe Thr Leu Glu His Gly Glu Phe
 130 135 140

Glu Asp Gly Lys Gly Lys Cys Pro Tyr Asp Pro Ala Lys Gly His Ala
 145 150 155 160

Gly Leu Leu Val Asp Gly Glu Leu Tyr Ser Ala Thr Leu Asn Asn Phe
 165 170 175

Leu Gly Thr Glu Pro Ile Ile Leu Arg Asn Met Gly Pro His His Ser
 180 185 190

Met Lys Thr Glu Tyr Leu Ala Phe Trp Leu Asn Glu Pro His Phe Val
 195 200 205

Gly Ser Ala Tyr Val Pro Glu Ser Val Gly Ser Phe Thr Gly Asp Asp
 210 215 220

226

Asp Lys Val Tyr Phe Phe Phe Arg Glu Arg Ala Val Glu Ser Asp Cys
 225 230 235 240

Tyr Ala Glu Gln Val Val Ala Arg Val Ala Arg Val Cys Lys Gly Asp
 245 250 255

Met Gly Gly Ala Arg Thr Leu Gln Arg Lys Trp Thr Thr Phe Leu Lys
 260 265 270

Ala Arg Leu Ala Cys Ser Ala Pro Asn Trp Gln Leu Tyr Phe Asn Gln
 275 280 285

Leu Gln Ala Met His Thr Leu Gln Asp Thr Ser Trp His Asn Thr Thr
 290 295 300

Phe Phe Gly Val Phe Gln Ala Gln Trp Gly Asp Met Tyr Leu Ser Ala
 305 310 315 320

Ile Cys Glu Tyr Gln Leu Glu Glu Ile Gln Arg Val Phe Glu Gly Pro
 325 330 335

Tyr Lys Glu Tyr His Glu Glu Ala Gln Lys Trp Asp Arg Tyr Thr Asp
 340 345 350

Pro Val Pro Ser Pro Arg Pro Gly Ser Cys Ile Asn Asn Trp His Arg
 355 360 365

Arg His Gly Tyr Thr Ser Ser Leu Glu Leu Pro Asp Asn Ile Leu Asn
 370 375 380

Phe Val Lys Lys His Pro Leu Met Glu Glu Gln Val Gly Pro Arg Trp
 385 390 395 400

Ser Arg Pro Leu Leu Val Lys Lys Gly Thr Asn Phe Thr His Leu Val
 405 410 415

Ala Asp Arg Val Thr Gly Leu Asp Gly Ala Thr Tyr Thr Val Leu Phe
 420 425 430

Ile Gly Thr Gly Asp Gly Trp Leu Leu Lys Ala Val Ser Leu Gly Pro
 435 440 445

Trp Val His Leu Ile Glu Glu Leu Gln Leu Phe Asp Gln Glu Pro Met
 450 455 460

227

Arg Ser Leu Val Leu Ser Gln Ser Lys Lys Leu Leu Phe Ala Gly Ser
 465 470 475 480

Arg Ser Gln Leu Val Gln Leu Pro Val Ala Asp Cys Met Lys Tyr Arg
 485 490 495

Ser Cys Ala Asp Cys Val Leu Ala Arg Asp Pro Tyr Cys Ala Trp Ser
 500 505 510

Val Asn Thr Ser Arg Cys Val Ala Val Gly Gly His Ser Gly Leu Ser
 515 520 525

Trp Ala Leu His Arg Pro Gly Pro Pro Gly Leu Arg Leu Val Gly Ala
 530 535 540

Arg Leu Leu Met Tyr Pro Thr Ser Pro Thr Arg Ser Leu Leu Ile Gln
 545 550 555 560

His Val Met Thr Ser Asp Thr Ser Gly Ile Cys Asn Leu Arg Gly Ser
 565 570 575

Lys Lys Gly Glu Leu Phe His Ser Arg Arg Ile Gly Leu Ser Pro Gly
 580 585 590

Pro Glu Leu Glu Phe Leu Phe Ser Ser Ser Pro Ala Leu Leu Ser Cys
 595 600 605

Thr Asn Met His Ser Val Phe Ser Ala Thr Thr Val Arg Pro Thr Pro
 610 615 620

Lys Asn Ile Thr Val Val Ala Gly Thr Asp Leu Val Leu Pro Cys His
 625 630 635 640

Leu Ser Ser Asn Leu Ala His Ala Arg Trp Thr Phe Gly Gly Arg Asp
 645 650 655

Leu Pro Ala Glu Gln Pro Gly Ser Phe Leu Tyr Asp Ala Arg Leu Gln
 660 665 670

Ala Leu Val Val Met Ala Ala Gln Pro Arg His Ala Gly Ala Tyr His
 675 680 685

Cys Phe Ser Glu Glu Gln Gly Ala Arg Leu Ala Ala Glu Gly Tyr Leu
 690 695 700

228

Val Ala Val Val Ala Gly Pro Ser Val Thr Leu Glu Ala Arg Ala Pro
705 710 715 720

Leu Glu Asn Leu Gly Leu Val Trp Leu Ala Val Val Ala Leu Gly Ala
725 730 735

Val Cys Leu Val Leu Leu Leu Leu Val Leu Ser Leu Arg Arg Arg Leu
740 745 750

Arg Glu Glu Leu Glu Lys Gly Ala Lys Ala Thr Glu Arg Thr Leu Val
755 760 765

Tyr Pro Leu Glu Leu Pro Lys Glu Pro Thr Ser Pro Pro Phe Arg Pro
770 775 780

Cys Pro Glu Pro Asp Glu Lys Leu Trp Asp Pro Val Gly Tyr Tyr Tyr
785 790 795 800

Ser Asp Gly Ser Leu Lys Ile Val Pro Gly His Ala Arg Cys Gln Pro
805 810 815

Gly Gly Gly Pro Pro Ser Pro Pro Pro Gly Ile Pro Gly Gln Pro Leu
820 825 830

Pro Ser Pro Thr Arg Leu His Leu Gly Gly Gly Arg Asn Ser Asn Ala
835 840 845

Asn Gly Tyr Val Arg Leu Gln Leu Gly Gly Glu Asp Arg Gly Gly Leu
850 855 860

Gly His Pro Leu Pro Glu Leu Ala Asp Glu Leu Arg Arg Lys Leu Gln
865 870 875 880

Gln Arg Gln Pro Leu Pro Asp Ser Asn Pro Glu Glu Ser Ser Val
885 890 895

<210> 225

<211> 626

<212> PRT

<213> Homo sapien

<400> 225

Arg Gln Trp Ala Ala Gly Gln Arg Arg Lys Gln Arg Arg Gly Ser Glu
1 5 10 15

Gly Gly Val Gly Val Pro Ser Pro Ala Ala Glu Val Pro Leu Thr Leu
20 25 30

229

Arg Ala Arg Ala Ile Ser Leu Met Ala Ser Ser Gly Arg Lys Leu Trp
 35 40 45

Leu Arg Tyr Pro Ser Phe Leu Pro Ala Ala Trp Ile Cys Leu Leu Pro
 50 55 60

Gly Trp Glu Arg Leu Gly Arg Pro Arg Trp Gly Cys Gln Gly Gln Arg
 65 70 75 80

Leu Phe Gln Lys Cys Pro Leu Leu Pro Ile Arg Gly Phe Gly Trp His
 85 90 95

Leu Leu Val Ala Trp Gly Ala Gly Ser Arg Gly Ala Arg Leu Arg Ala
 100 105 110

Val Glu Pro Gln Gly Ser Cys Pro Ser Ala Ala Met Leu Thr Pro Ala
 115 120 125

Glu Leu Ala Thr Val Val Arg Arg Phe Ser Gln Thr Gly Ile Gln Asp
 130 135 140

Phe Leu Thr Leu Thr Leu Thr Glu Pro Thr Gly Leu Leu Tyr Val Gly
 145 150 155 160

Ala Arg Glu Ala Leu Phe Ala Phe Ser Met Glu Ala Leu Glu Leu Gln
 165 170 175

Gly Ala Ile Ser Trp Glu Ala Pro Val Glu Lys Lys Thr Glu Cys Ile
 180 185 190

Gln Lys Gly Lys Asn Asn Gln Thr Glu Cys Phe Asn Phe Ile Arg Phe
 195 200 205

Leu Gln Pro Tyr Asn Ala Ser His Leu Tyr Val Cys Gly Thr Tyr Ala
 210 215 220

Phe Gln Pro Lys Cys Thr Tyr Val Asn Met Leu Thr Phe Thr Leu Glu
 225 230 235 240

His Gly Glu Phe Glu Asp Gly Lys Gly Lys Cys Pro Tyr Asp Pro Ala
 245 250 255

Lys Gly His Ala Gly Leu Leu Val Asp Gly Glu Leu Tyr Ser Ala Thr
 260 265 270

230

Leu Asn Asn Phe Leu Gly Thr Glu Pro Ile Ile Leu Arg Asn Met Gly
 275 280 285

Pro His His Ser Met Lys Thr Glu Tyr Leu Ala Phe Trp Leu Asn Glu
 290 295 300

Pro His Phe Val Gly Ser Ala Tyr Val Pro Glu Ser Val Gly Ser Phe
 305 310 315 320

Thr Gly Asp Asp Asp Lys Val Tyr Phe Phe Phe Arg Glu Arg Ala Val
 325 330 335

Glu Ser Asp Cys Tyr Ala Glu Gln Val Val Ala Arg Val Ala Arg Val
 340 345 350

Cys Lys Gly Asp Met Gly Gly Ala Arg Thr Leu Gln Arg Lys Trp Thr
 355 360 365

Thr Phe Leu Lys Ala Arg Leu Ala Cys Ser Ala Pro Asn Trp Gln Leu
 370 375 380

Tyr Phe Asn Gln Leu Gln Ala Met His Thr Leu Gln Asp Thr Ser Trp
 385 390 395 400

His Asn Thr Thr Phe Phe Gly Val Phe Gln Ala Gln Trp Gly Asp Met
 405 410 415

Tyr Leu Ser Ala Ile Cys Glu Tyr Gln Leu Glu Glu Ile Gln Arg Val
 420 425 430

Phe Glu Gly Pro Tyr Lys Glu Tyr His Glu Glu Ala Gln Lys Trp Asp
 435 440 445

Arg Tyr Thr Asp Pro Val Pro Ser Pro Arg Pro Gly Ser Cys Ile Asn
 450 455 460

Asn Trp His Arg Arg His Gly Tyr Thr Ser Ser Leu Glu Leu Pro Asp
 465 470 475 480

Asn Ile Leu Asn Phe Val Lys Lys His Pro Leu Met Glu Glu Gln Val
 485 490 495

Gly Pro Arg Trp Ser Arg Pro Leu Leu Val Lys Lys Gly Thr Asn Phe
 500 505 510

231

Thr His Leu Val Ala Asp Arg Val Thr Gly Leu Asp Gly Ala Thr Tyr
 515 520 525

Thr Val Leu Phe Ile Gly Thr Gly Asp Gly Trp Leu Leu Lys Ala Val
 530 535 540

Ser Leu Gly Pro Trp Val His Leu Ile Glu Glu Leu Gln Leu Phe Asp
 545 550 555 560

Gln Glu Pro Met Arg Ser Leu Val Leu Ser Gln Ser Lys Lys Leu Leu
 565 570 575

Phe Ala Gly Ser Arg Ser Gln Leu Val Gln Leu Pro Val Ala Asp Cys
 580 585 590

Met Lys Tyr Arg Ser Cys Ala Asp Cys Val Leu Ala Arg Asp Pro Tyr
 595 600 605

Cys Ala Trp Ser Val Asn Thr Ser Arg Cys Val Ala Val Gly Gly His
 610 615 620

Ser Gly
 625

<210> 226
 <211> 146
 <212> PRT
 <213> Homo sapien

<400> 226

Ser Val Thr Asp Phe Phe Gln Ala Asp Gln Gln Val Val Val Val Glu
 1 5 10 15

Gly Leu Cys Pro Gly Trp Gly Asp Ala Leu Asn His His Asn Leu Leu
 20 25 30

Val Cys Ser Val Thr Asp Phe Tyr Pro Gly Gln Ile Lys Val Arg Trp
 35 40 45

Phe Arg Asn Asp Gln Glu Glu Thr Ala Gly Val Val Ser Thr Pro Leu
 50 55 60

Ile Arg Asn Gly Asp Trp Thr Phe Gln Ile Leu Val Met Leu Glu Met
 65 70 75 80

Thr Pro Gln Arg Gly Asp Val Tyr Thr Cys His Val Glu His Pro Ser
 85 90 95

232

Leu Gln Ser Pro Ile Thr Val Glu Trp Arg Ala Gln Ser Glu Ser Ala
 100 105 110

Gln Ser Lys Met Leu Ser Gly Val Gly Gly Phe Val Leu Gly Leu Ile
 115 120 125

Phe Leu Gly Leu Gly Leu Ile Ile Arg Gln Arg Ser Gln Lys Gly Leu
 130 135 140

Leu His
 145

<210> 227
 <211> 144
 <212> PRT
 <213> Homo sapien

<400> 227

Gln Ile Ser Ile Gln Ala Asp Gln Gln Val Val Val Val Glu Gly Leu
 1 5 10 15

Cys Pro Gly Trp Gly Asp Ala Leu Asn His His Asn Leu Leu Val Cys
 20 25 30

Ser Val Thr Asp Phe Tyr Pro Gly Gln Ile Lys Val Arg Trp Phe Arg
 35 40 45

Asn Asp Gln Glu Glu Thr Ala Gly Val Val Ser Thr Pro Leu Ile Arg
 50 55 60

Asn Gly Asp Trp Thr Phe Gln Ile Leu Val Met Leu Glu Met Thr Pro
 65 70 75 80

Gln Arg Gly Asp Val Tyr Thr Cys His Val Glu His Pro Ser Leu Gln
 85 90 95

Ser Pro Ile Thr Val Glu Trp Arg Ala Gln Ser Glu Ser Ala Gln Ser
 100 105 110

Lys Met Leu Ser Gly Val Gly Gly Phe Val Leu Gly Leu Ile Phe Leu
 115 120 125

Gly Leu Gly Leu Ile Ile Arg Gln Arg Ser Gln Lys Gly Leu Leu His
 130 135 140

233

<210> 228
<211> 34
<212> PRT
<213> Homo sapien

<400> 228

Ala Ala Ala Tyr Tyr Tyr Tyr Tyr Cys Ser Glu Phe Lys Leu Leu Thr
1 5 10 15

Met Tyr Gly Asp Met Trp Gly Glu Asp Gln Leu Gly Ala Trp Ala Leu
20 25 30

Thr Glu

<210> 229
<211> 46
<212> PRT
<213> Homo sapien

<400> 229

Arg Pro Pro Thr Thr Thr Thr Thr Ala Arg Ile Gln Ala Ser Asn Asp
1 5 10 15

Val Arg Gly His Val Gly Arg Gly Pro Ala Gly Cys Leu Gly Ile Asp
20 25 30

Arg Met Met Val Val Leu Tyr His Leu Ile Asn Lys Lys Lys
35 40 45

<210> 230
<211> 83
<212> PRT
<213> Homo sapien

<400> 230

Ala Lys Cys Cys Leu Glu Gln Gly Glu Val Leu Lys Leu Leu Ser Ser
1 5 10 15

Ala Ala Ser Pro Leu Arg Lys Pro Leu Cys His Gln Tyr His Glu Ala
20 25 30

Leu Arg Asp Cys Pro Val Ser Pro Arg Ala Ser Ser Cys Leu Leu Leu
35 40 45

Ser Ser Thr Leu Ser Thr Lys Phe Gln Thr Lys Arg Gly Lys Gln Val
50 55 60

234

Cys Ala Asp Pro Ser Glu Ser Trp Val Gln Glu Tyr Val Tyr Asp Leu
 65 70 75 80

Glu Leu Asn

<210> 231
 <211> 81
 <212> PRT
 <213> Homo sapien
 <220>
 <221> MISC_FEATURE
 <222> (6)..(7)
 <223> X=any amino acid

<400> 231

Met Leu Ser Arg Ala Xaa Xaa Val Leu Lys Leu Leu Ser Ser Ala Ala
 1 5 10 15

Ser Pro Leu Arg Lys Pro Leu Cys His Gln Tyr His Glu Ala Leu Arg
 20 25 30

Asp Cys Pro Val Ser Pro Arg Ala Ser Ser Cys Leu Leu Ser Ser
 35 40 45

Thr Leu Ser Thr Lys Phe Gln Thr Lys Arg Gly Lys Gln Val Cys Ala
 50 55 60

Asp Pro Ser Glu Ser Trp Val Gln Glu Tyr Val Tyr Asp Leu Glu Leu
 65 70 75 80

Asn

<210> 232
 <211> 305
 <212> PRT
 <213> Homo sapien

<400> 232

Met Asp Arg Ser Gly Gly Ile Thr Glu Ala Arg Ser Ser Ala His Asp
 1 5 10 15

Leu Tyr Pro Thr Tyr Ser Asn Phe His Ser Ser Pro Cys Pro Arg Ser
 20 25 30

Arg Val Leu Tyr Gln Pro Phe Ile Leu Thr Arg Phe Ser Thr Met Ala

235

35

40

45

Phe Asn Lys Val His Val Phe Leu Val Lys Ala Ala Glu Lys Lys Lys
50 55 60

Lys Lys Asn Lys Thr Lys Lys Phe Phe Gly Arg Leu Gly Pro Ser Arg
65 70 75 80

Lys Val Phe Lys Pro His Phe Cys Trp Gly Gly Gly Ala Pro Arg Asn
85 90 95

Ser Lys Val Asn His Trp Ala Gln Arg Gly Trp Pro Lys Glu Arg Ala
100 105 110

Thr Gly Trp Pro Ala Asp Arg Gly Ala Gly Cys Leu Thr Pro Asn Lys
115 120 125

Lys Arg Ala Gly Gly Arg His Arg Asp Val Phe Ser Gly Thr Thr Asn
130 135 140

Pro Glu Arg Glu Arg Leu Gly Gly Gln Lys Gly Leu Pro His Gln Gly
145 150 155 160

Gly Ile Pro Arg Arg Gln Ser Pro Asn Thr Leu Tyr Arg Ala Ala Leu
165 170 175

Val Glu Lys Asp Lys Thr Asp Asp Leu Glu His Arg Gln Gly Arg Arg
180 185 190

Lys His Ile Thr His Arg Arg Pro Arg His Thr Met Gln Ser Thr Thr
195 200 205

Thr Ala Glu Ile Lys Arg Lys Arg Lys Gly Arg Lys Arg Ala Glu Lys
210 215 220

Tyr Gln Arg Gln Gln Thr Lys Thr Arg Gly Arg Ser Gly Thr Gln Glu
225 230 235 240

Asn Arg Gln Arg Lys Lys Asn Glu Glu Val Gly Glu Arg Thr Arg Arg
245 250 255

Gly Asp Lys Lys Lys Lys Gln Arg Thr Arg Arg Arg Thr Ser Lys Thr
260 265 270

Tyr Arg Arg Lys Gln Gly Lys His Glu Glu Lys Lys Thr Arg Arg Arg
275 280 285

236

Glu Glu Arg Asp Lys Trp Arg Ala Gly Ala Arg Ser Ser Glu Gly Lys
 290 295 300

Thr
 305

<210> 233
 <211> 155
 <212> PRT
 <213> Homo sapien

<400> 233

Asn Asp Arg Gly Lys Glu Val Ser Leu Ser Thr Val Pro Ala Ser Gly
 1 5 10 15

His His Ser Gly Pro Ser Leu His Ala Glu Asn His Thr Ser Gln Thr
 20 25 30

Phe Thr Gln His Phe Leu Pro Gln Ser Gln Lys Met His Lys Glu Glu
 35 40 45

His Glu Val Ala Val Leu Gly Ala Pro Pro Ser Thr Ile Leu Pro Arg
 50 55 60

Ser Thr Val Ile Asn Ile His Ser Glu Thr Ser Val Pro Asp His Val
 65 70 75 80

Val Trp Ser Leu Phe Asn Thr Leu Phe Leu Asn Trp Cys Cys Leu Gly
 85 90 95

Phe Ile Ala Phe Ala Tyr Ser Val Lys Ser Arg Asp Arg Lys Met Val
 100 105 110

Gly Asp Val Thr Gly Ala Gln Ala Tyr Ala Ser Thr Ala Lys Cys Leu
 115 120 125

Asn Ile Trp Ala Leu Ile Leu Gly Ile Leu Met Thr Ile Leu Leu Ile
 130 135 140

Val Ile Pro Val Leu Ile Phe Gln Ala Tyr Gly
 145 150 155

<210> 234
 <211> 140
 <212> PRT
 <213> Homo sapien

237

<400> 234

Met Ala Leu Pro Glu Ser Glu Lys Gly Thr His Gln Val Ile Val Gln
 1 5 10 15

Pro Gln Trp Trp Val Glu Asn Ser Leu Cys Trp Ala Lys Ala Glu Val
 20 25 30

Met Asp Val Ala Pro Arg Leu Leu Glu Met Ser Asp Ala Trp Val Met
 35 40 45

Lys Cys Gly Gly Trp Trp Ser Leu Ile Ser Gly Ala Gly Arg Ala Asn
 50 55 60

Glu Glu Pro Val Cys His Ser Thr Arg Leu Ser Cys Trp Gly Ile Leu
 65 70 75 80

Val Pro Ser Pro Ser Pro Leu Pro Gln Ser Arg Asp Arg Lys Met Val
 85 90 95

Gly Asp Val Asn Arg Gly Pro Gln Ala Tyr Ala Ser Thr Ala Lys Cys
 100 105 110

Leu Asn Ile Trp Ala Leu Ile Leu Gly Ile Leu Met Thr Ile Leu Leu
 115 120 125

Ile Val Ile Pro Val Leu Ile Phe Gln Ala Tyr Gly
 130 135 140

<210> 235

<211> 120

<212> PRT

<213> Homo sapien

<220>

<221> MISC_FEATURE

<222> (105)..(105)

<223> X=any amino acid

<400> 235

Asn Asp Arg Gly Lys Glu Val Ser Leu Ser Thr Val Pro Ala Ser Gly
 1 5 10 15

His His Ser Gly Pro Ser Leu His Ala Glu Asn His Thr Ser Gln Thr
 20 25 30

Phe Thr Gln His Phe Leu Pro Gln Ser Gln Lys Met His Lys Glu Glu

238

35

40

45

His Glu Val Ala Val Leu Gly Ala Pro Pro Ser Thr Ile Leu Pro Arg
 50 55 60

Ser Thr Val Ile Asn Ile His Ser Glu Thr Ser Val Pro Asp His Val
 65 70 75 80

Val Trp Ser Leu Phe Asn Thr Leu Phe Leu Asn Trp Cys Cys Leu Gly
 85 90 95

Phe Ile Ala Phe Ala Tyr Ser Val Xaa Thr Gly Thr His Ala Leu Pro
 100 105 110

Glu Ser Glu Lys Gly Thr His Arg
 115 120

<210> 236

<211> 157

<212> PRT

<213> Homo sapien

<400> 236

Asn Asp Arg Gly Lys Glu Val Ser Leu Ser Thr Val Pro Ala Ser Gly
 1 5 10 15

His His Ser Gly Pro Ser Leu His Ala Glu Asn His Thr Ser Gln Thr
 20 25 30

Phe Thr Gln His Phe Leu Pro Gln Ser Gln Lys Met His Lys Glu Glu
 35 40 45

His Glu Val Ala Val Leu Gly Ala Pro Pro Ser Thr Ile Leu Pro Arg
 50 55 60

Ser Thr Val Ile Asn Ile His Ser Glu Thr Ser Val Pro Asp His Val
 65 70 75 80

Val Trp Ser Leu Phe Asn Thr Leu Phe Leu Asn Trp Cys Cys Leu Gly
 85 90 95

Phe Ile Ala Phe Ala Tyr Ser Val Lys Val Arg Met Ala Leu Ala Glu
 100 105 110

Ile Gln Gly Val Pro Val Ser Leu Gly Leu His Leu Pro Thr Cys Cys
 115 120 125

239

Leu Gly Trp Gly Leu Val Cys Pro Cys Asp Cys Glu Phe Val Cys Thr
 130 135 140

Ser Ala Pro Cys Val Leu Thr Ser Val Ala Leu Ser Val
 145 150 155

<210> 237
 <211> 66
 <212> PRT
 <213> Homo sapien

<400> 237

Met His Lys Glu Glu His Glu Val Ala Val Leu Gly Ala Pro Pro Ser
 1 5 10 15

Thr Ile Leu Pro Arg Ser Thr Val Ile Asn Ile His Ser Glu Thr Ser
 20 25 30

Val Pro Asp His Val Val Trp Ser Leu Phe Asn Thr Leu Phe Met Asn
 35 40 45

Pro Cys Cys Leu Asn Trp Cys Cys Leu Gly Phe Asn Ser Ile Arg Leu
 50 55 60

Thr Pro
 65

<210> 238
 <211> 105
 <212> PRT
 <213> Homo sapien

<400> 238

Asn Asp Arg Gly Lys Glu Val Ser Leu Ser Thr Val Pro Ala Ser Gly
 1 5 10 15

His His Ser Gly Pro Ser Leu His Ala Glu Asn His Thr Ser Gln Thr
 20 25 30

Phe Thr Gln His Phe Leu Pro Gln Ser Gln Lys Met His Lys Glu Glu
 35 40 45

His Glu Val Ala Val Leu Gly Ala Pro Pro Ser Thr Ile Leu Pro Arg
 50 55 60

Ser Thr Val Ile Asn Ile His Ser Glu Thr Ser Val Pro Asp His Val
 65 70 75 80

240

Val Trp Ser Leu Phe Asn Thr Leu Phe Leu Asn Trp Cys Cys Leu Gly
 85 90 95

Phe Ile Ala Phe Ala Tyr Ser Val Ser
 100 105

<210> 239
 <211> 238
 <212> PRT
 <213> Homo sapien

<220>
 <221> MISC_FEATURE
 <222> (74)..(74)
 <223> X=any amino acid

<220>
 <221> MISC_FEATURE
 <222> (81)..(81)
 <223> X=any amino acid

<220>
 <221> MISC_FEATURE
 <222> (87)..(87)
 <223> X=any amino acid

<220>
 <221> MISC_FEATURE
 <222> (104)..(104)
 <223> X=any amino acid

<220>
 <221> MISC_FEATURE
 <222> (112)..(112)
 <223> X=any amino acid

<400> 239

Gln Ile Asn Pro Ala Ser Thr Leu Tyr Ser Asp His Leu Ser Tyr Phe
 1 5 10 15

Cys Phe Ile Gly Pro Phe Ile Val Leu Ala Leu Phe His Gly Lys Phe
 20 25 30

Ile Asp Thr Gly Phe Ser Leu Pro Phe Tyr Gln Pro Ile Leu Ser Lys
 35 40 45

Lys Leu Thr Ile Lys Asp Leu Glu Ser Ile Asp Thr Glu Cys Tyr Tyr
 50 55 60

241

Ser Pro Ile Trp Ile Arg Asp Asn His Xaa Glu Glu Cys Gly Leu Glu
65 70 75 80

Xaa Tyr Phe Ser Val Asp Xaa Glu Ile Leu Gly Lys Val Thr Ser His
85 90 95

Asp Leu Lys Leu Gly Gly Ser Xaa Ile Leu Val Thr Glu Glu Asn Xaa
100 105 110

Asp Glu Tyr Ile Gly Leu Met Thr Glu Trp Arg Phe Ser Arg Gly Val
115 120 125

Gln Glu Gln Thr Lys Ala Phe Leu Asp Gly Phe Asn Glu Val Val Pro
130 135 140

Leu Gln Trp Leu Gln Tyr Phe Asp Glu Lys Glu Leu Glu Val Met Leu
145 150 155 160

Cys Gly Met Gln Glu Val Asp Leu Ala Asp Trp Gln Arg Asn Thr Val
165 170 175

Tyr Arg His Tyr Thr Arg Asn Ser Lys Gln Ile Ile Trp Phe Trp Gln
180 185 190

Phe Val Lys Glu Thr Asp Asn Glu Val Arg Met Arg Leu Leu Gln Phe
195 200 205

Val Thr Gly Thr Cys Arg Leu Pro Leu Gly Gly Phe Ala Glu Leu Met
210 215 220

Gly Lys Cys Asn Phe Thr Val Ile Ser Leu Tyr Val Ile Leu
225 230 235

<210> 240

<211> 238

<212> PRT

<213> Homo sapien

<400> 240

Gln Ile Asn Pro Ala Ser Thr Leu Tyr Ser Asp His Leu Ser Tyr Phe
1 5 10 15

Cys Phe Ile Gly Pro Phe Ile Val Leu Ala Leu Phe His Gly Lys Phe
20 25 30

242

Ile Asp Thr Gly Phe Ser Leu Pro Phe Tyr Gln Pro Ile Leu Ser Lys
 35 40 45

Lys Leu Thr Ile Lys Asp Leu Glu Ser Ile Asp Thr Glu Cys Tyr Tyr
 50 55 60

Ser Pro Ile Trp Ile Arg Asp Asn His Pro Glu Glu Cys Gly Leu Glu
 65 70 75 80

Lys Tyr Phe Ser Val Asp Leu Glu Ile Leu Gly Lys Val Thr Ser His
 85 90 95

Asp Leu Lys Leu Gly Gly Ser Asn Ile Leu Val Thr Glu Glu Asn Gln
 100 105 110

Asp Glu Tyr Ile Gly Leu Met Thr Glu Trp Arg Phe Ser Arg Gly Val
 115 120 125

Gln Glu Gln Thr Lys Ala Phe Leu Asp Gly Phe Asn Glu Val Val Pro
 130 135 140

Leu Gln Trp Leu Gln Tyr Phe Asp Glu Lys Glu Leu Glu Val Met Leu
 145 150 155 160

Cys Gly Met Gln Glu Val Asp Leu Ala Asp Trp Gln Arg Asn Thr Val
 165 170 175

Tyr Arg His Tyr Thr Arg Asn Ser Lys Gln Ile Ile Trp Phe Trp Gln
 180 185 190

Phe Val Lys Glu Thr Asp Asn Glu Val Arg Met Arg Leu Leu Gln Phe
 195 200 205

Val Thr Gly Thr Cys Arg Leu Pro Leu Gly Gly Phe Ala Glu Leu Met
 210 215 220

Gly Lys Cys Asn Phe Thr Val Ile Ser Leu Tyr Val Ile Leu
 225 230 235

<210> 241

<211> 656

<212> PRT

<213> Homo sapien

<400> 241

Leu Val Arg Pro Arg Gln Gly Arg Arg Arg Pro Cys Arg Arg Arg Glu
 1 5 10 15

243

Leu Trp Val Ser Arg Phe Gly Ser Ala Thr Arg Gln Val Asp Ser Glu
 20 25 30

Ser Ala Ser Val Val Gly Lys Arg Pro Pro Phe His Gly Thr Pro Ser
 35 40 45

Thr Met Ser Ser Pro Ala Ser Thr Pro Ser Arg Arg Gly Ser Arg Arg
 50 55 60

Gly Arg Ala Thr Pro Ala Gln Thr Pro Arg Ser Glu Asp Ala Arg Ser
 65 70 75 80

Ser Pro Ser Gln Arg Arg Arg Gly Glu Asp Ser Thr Ser Thr Gly Glu
 85 90 95

Leu Gln Pro Met Pro Thr Ser Pro Gly Val Asp Leu Gln Ser Pro Ala
 100 105 110

Ala Gln Asp Val Leu Phe Ser Ser Pro Pro Gln Met His Ser Ser Ala
 115 120 125

Ile Pro Leu Asp Phe Asp Val Ser Ser Pro Leu Thr Tyr Gly Thr Pro
 130 135 140

Ser Ser Arg Val Glu Gly Thr Pro Arg Ser Gly Val Arg Gly Thr Pro
 145 150 155 160

Val Arg Gln Arg Pro Asp Leu Gly Ser Ala Gln Lys Gly Leu Gln Val
 165 170 175

Asp Leu Gln Ser Asp Gly Ala Ala Ala Glu Asp Ile Val Ala Ser Glu
 180 185 190

Gln Ser Leu Gly Gln Lys Leu Val Ile Trp Gly Thr Asp Val Asn Val
 195 200 205

Ala Ala Cys Lys Glu Asn Phe Gln Arg Phe Leu Gln Arg Phe Ile Asp
 210 215 220

Pro Leu Ala Lys Glu Glu Glu Asn Val Gly Ile Asp Ile Thr Glu Pro
 225 230 235 240

Leu Tyr Met Gln Arg Leu Gly Glu Ile Asn Val Ile Gly Glu Pro Phe
 245 250 255

244

Leu Asn Val Asn Cys Glu His Ile Lys Ser Phe Asp Lys Asn Leu Tyr
 260 265 270

Arg Gln Leu Ile Ser Tyr Pro Gln Glu Val Ile Pro Thr Phe Asp Met
 275 280 285

Ala Val Asn Glu Ile Phe Phe Asp Arg Tyr Pro Asp Ser Ile Leu Glu
 290 295 300

His Gln Ile Gln Val Arg Pro Phe Asn Ala Leu Lys Thr Lys Asn Met
 305 310 315 320

Arg Asn Leu Asn Pro Glu Asp Ile Asp Gln Leu Ile Thr Ile Ser Gly
 325 330 335

Met Val Ile Arg Thr Ser Gln Leu Ile Pro Glu Met Gln Glu Ala Phe
 340 345 350

Phe Gln Cys Gln Val Cys Ala His Thr Thr Arg Val Glu Met Asp Arg
 355 360 365

Gly Arg Ile Ala Glu Pro Ser Val Cys Gly Arg Cys His Thr Thr His
 370 375 380

Ser Met Ala Leu Ile His Asn Arg Ser Leu Phe Ser Asp Lys Gln Met
 385 390 395 400

Ile Lys Leu Gln Glu Ser Pro Glu Asp Met Pro Ala Gly Gln Thr Pro
 405 410 415

His Thr Val Ile Leu Phe Ala His Asn Asp Leu Val Asp Lys Val Gln
 420 425 430

Pro Gly Asp Arg Val Asn Val Thr Gly Ile Tyr Arg Ala Val Pro Ile
 435 440 445

Arg Val Asn Pro Arg Val Ser Asn Val Lys Ser Val Tyr Lys Thr His
 450 455 460

Ile Asp Val Ile His Tyr Arg Lys Thr Asp Ala Lys Arg Leu His Gly
 465 470 475 480

Leu Asp Glu Glu Ala Glu Gln Lys Leu Phe Ser Glu Lys Arg Val Glu
 485 490 495

245

Leu Leu Lys Glu Leu Ser Arg Lys Pro Asp Ile Tyr Glu Arg Leu Ala
 500 505 510

Ser Ala Leu Ala Pro Ser Ile Tyr Glu His Glu Asp Ile Lys Lys Gly
 515 520 525

Ile Leu Leu Gln Leu Phe Gly Gly Thr Arg Lys Asp Phe Ser His Thr
 530 535 540

Gly Arg Gly Lys Phe Arg Ala Glu Ile Asn Ile Leu Leu Cys Gly Asp
 545 550 555 560

Pro Gly Thr Ser Lys Ser Gln Leu Leu Gln Tyr Val Tyr Asn Leu Val
 565 570 575

Pro Arg Gly Gln Tyr Thr Ser Gly Lys Gly Ser Ser Ala Val Gly Leu
 580 585 590

Thr Ala Tyr Val Met Lys Asp Pro Glu Thr Arg Gln Leu Val Leu Gln
 595 600 605

Thr Gly Ala Leu Val Leu Ser Asp Asn Gly Ile Cys Cys Ile Asp Glu
 610 615 620

Phe Asp Lys Met Asn Glu Ser Thr Arg Ser Val Leu His Glu Val Met
 625 630 635 640

Glu Gln Gln Thr Leu Ser Ile Ala Lys Gly Glu Ser Pro Ser Pro Pro
 645 650 655

<210> 242

<211> 918

<212> PRT

<213> Homo sapien

<400> 242

Met Pro Thr Ser Pro Gly Val Asp Leu Gln Ser Pro Ala Ala Gln Asp
 1 5 10 15

Val Leu Phe Ser Ser Pro Pro Gln Met His Ser Ser Ala Ile Pro Leu
 20 25 30

Asp Phe Asp Val Ser Ser Pro Leu Thr Tyr Gly Thr Pro Ser Ser Arg
 35 40 45

Val Glu Gly Thr Pro Arg Ser Gly Val Arg Gly Thr Pro Val Arg Gln
 50 55 60

246

Arg Pro Asp Leu Gly Ser Ala Gln Lys Gly Leu Gln Val Asp Leu Gln
 65 70 75 80

Ser Asp Gly Ala Ala Ala Glu Asp Ile Val Ala Ser Glu Gln Ser Leu
 85 90 95

Gly Gln Lys Leu Val Ile Trp Gly Thr Asp Val Asn Val Ala Ala Cys
 100 105 110

Lys Glu Asn Phe Gln Arg Phe Leu Gln Arg Phe Ile Asp Pro Leu Ala
 115 120 125

Lys Glu Glu Glu Asn Val Gly Ile Asp Ile Thr Glu Pro Leu Tyr Met
 130 135 140

Gln Arg Leu Gly Glu Ile Asn Val Ile Gly Glu Pro Phe Leu Asn Val
 145 150 155 160

Asn Cys Glu His Ile Lys Ser Phe Asp Lys Asn Leu Tyr Arg Gln Leu
 165 170 175

Ile Ser Tyr Pro Gln Glu Val Ile Pro Thr Phe Asp Met Ala Val Asn
 180 185 190

Glu Ile Phe Phe Asp Arg Tyr Pro Asp Ser Ile Leu Glu His Gln Ile
 195 200 205

Gln Val Arg Pro Phe Asn Ala Leu Lys Thr Lys Asn Met Arg Asn Leu
 210 215 220

Asn Pro Glu Asp Ile Asp Gln Leu Ile Thr Ile Ser Gly Met Val Ile
 225 230 235 240

Arg Thr Ser Gln Leu Ile Pro Glu Met Gln Glu Ala Phe Phe Gln Cys
 245 250 255

Gln Val Cys Ala His Thr Thr Arg Val Glu Met Asp Arg Gly Arg Ile
 260 265 270

Ala Glu Pro Ser Val Cys Gly Arg Cys His Thr Thr His Ser Met Ala
 275 280 285

Leu Ile His Asn Arg Ser Leu Phe Ser Asp Lys Gln Met Ile Lys Leu
 290 295 300

247

Gln Glu Ser Pro Glu Asp Met Pro Ala Gly Gln Thr Pro His Thr Val
305 310 315 320

Ile Leu Phe Ala His Asn Asp Leu Val Asp Lys Val Gln Pro Gly Asp
325 330 335

Arg Val Asn Val Thr Gly Ile Tyr Arg Ala Val Pro Ile Arg Val Asn
340 345 350

Pro Arg Val Ser Asn Val Lys Ser Val Tyr Lys Thr His Ile Asp Val
355 360 365

Ile His Tyr Arg Lys Thr Asp Ala Lys Arg Leu His Gly Leu Asp Glu
370 375 380

Glu Ala Glu Gln Lys Leu Phe Ser Glu Lys Arg Val Glu Leu Leu Lys
385 390 395 400

Glu Leu Ser Arg Lys Pro Asp Ile Tyr Glu Arg Leu Ala Ser Ala Leu
405 410 415

Ala Pro Ser Ile Tyr Glu His Glu Asp Ile Lys Lys Gly Ile Leu Leu
420 425 430

Gln Leu Phe Gly Gly Thr Arg Lys Asp Phe Ser His Thr Gly Arg Gly
435 440 445

Lys Phe Arg Ala Glu Ile Asn Ile Leu Leu Cys Gly Asp Pro Gly Thr
450 455 460

Ser Lys Ser Gln Leu Leu Gln Tyr Val Tyr Asn Leu Val Pro Arg Gly
465 470 475 480

Gln Tyr Thr Ser Gly Lys Gly Ser Ser Ala Val Gly Leu Thr Ala Tyr
485 490 495

Val Met Lys Asp Pro Glu Thr Arg Gln Leu Val Leu Gln Thr Gly Ala
500 505 510

Leu Val Leu Ser Asp Asn Gly Ile Cys Cys Ile Asp Glu Phe Asp Lys
515 520 525

Met Asn Glu Ser Thr Arg Ser Val Leu His Glu Val Met Glu Gln Gln
530 535 540

248

Thr Leu Ser Ile Ala Lys Gly Glu Ile Ala Phe Ser Thr Val Asn Met
 545 550 555 560

Asp Val Phe Lys Ile Cys Gly Pro Leu Lys Asp Arg Val Cys Gly Thr
 565 570 575

Val Leu Cys Tyr Leu Gly Ser Asn Phe Gly Glu Ile Asp Lys Cys Phe
 580 585 590

Pro His His Ile Ser Ala Lys Ser Gln His Val Phe Tyr Arg Val Ser
 595 600 605

Arg Phe Val Phe Ile Ala Val Leu Ala Leu Asn Cys Pro Lys Ala Leu
 610 615 620

Ala Arg Cys Leu Leu Pro Glu Lys Asp Val Val Ile Ala His Ile His
 625 630 635 640

Leu Asn Ser Val Leu Gly Met Asn Leu Arg Thr Gly Leu Ile Gln Ala
 645 650 655

Gly Ile Ile Cys Gln Leu Asn Ala Arg Thr Ser Val Leu Ala Ala Ala
 660 665 670

Asn Pro Ile Glu Ser Gln Trp Asn Pro Lys Lys Thr Thr Ile Glu Asn
 675 680 685

Ile Gln Leu Pro His Thr Leu Leu Ser Arg Phe Asp Leu Ile Phe Leu
 690 695 700

Met Leu Asp Pro Gln Asp Glu Ala Tyr Asp Arg Arg Leu Ala His His
 705 710 715 720

Leu Val Ala Leu Tyr Tyr Gln Ser Glu Glu Gln Ala Glu Glu Glu Leu
 725 730 735

Leu Asp Met Ala Val Leu Lys Asp Tyr Ile Ala Tyr Ala His Ser Thr
 740 745 750

Ile Met Pro Arg Leu Ser Glu Glu Ala Ser Gln Ala Leu Ile Glu Ala
 755 760 765

Tyr Val Asp Met Arg Lys Ile Gly Ser Ser Arg Gly Met Val Ser Ala
 770 775 780

Tyr Pro Arg Gln Leu Glu Ser Leu Ile Arg Leu Ala Glu Ala His Ala

249

785 790 795 800
 Lys Val Arg Leu Ser Asn Lys Val Glu Ala Ile Asp Val Glu Glu Ala
 805 810 815
 Lys Arg Leu His Arg Glu Ala Leu Lys Gln Ser Ala Thr Asp Pro Arg
 820 825 830
 Thr Gly Ile Val Asp Ile Ser Ile Leu Thr Thr Gly Met Ser Ala Thr
 835 840 845
 Ser Arg Lys Arg Lys Glu Glu Leu Ala Glu Ala Leu Lys Lys Leu Ile
 850 855 860
 Leu Ser Lys Gly Lys Thr Pro Ala Leu Lys Tyr Gln Gln Leu Phe Glu
 865 870 875 880
 Asp Ile Arg Gly Gln Ser Asp Ile Ala Ile Thr Lys Asp Met Phe Glu
 885 890 895
 Glu Ala Leu Arg Ala Leu Ala Asp Asp Asp Phe Leu Thr Val Thr Gly
 900 905 910
 Lys Thr Val Arg Leu Leu
 915

<210> 243
 <211> 376
 <212> PRT
 <213> Homo sapien
 <400> 243

Met Ala Ala Ala Val Val Glu Phe Gln Arg Ala Gln Ser Leu Leu
 1 5 10 15
 Ser Thr Asp Arg Glu Ala Ser Ile Asp Ile Leu His Ser Ile Val Lys
 20 25 30
 Arg Asp Ile Gln Glu Asn Asp Glu Glu Ala Val Gln Val Lys Glu Gln
 35 40 45
 Ser Ile Leu Glu Leu Gly Ser Leu Leu Ala Lys Thr Gly Gln Ala Ala
 50 55 60
 Glu Leu Gly Gly Leu Leu Lys Tyr Val Arg Pro Phe Leu Asn Ser Ile
 65 70 75 80

250

Ser Lys Ala Lys Ala Ala Arg Leu Val Arg Ser Leu Leu Asp Leu Phe
85 90 95

Leu Asp Met Glu Ala Ala Thr Gly Gln Glu Val Glu Leu Cys Leu Glu
100 105 110

Cys Ile Glu Trp Ala Lys Ser Glu Lys Arg Thr Phe Leu Arg Gln Ala
115 120 125

Leu Glu Ala Arg Leu Val Ser Leu Tyr Phe Asp Thr Lys Arg Tyr Gln
130 135 140

Glu Ala Leu His Leu Gly Ser Gln Leu Leu Arg Glu Leu Lys Lys Met
145 150 155 160

Asp Asp Lys Ala Leu Leu Val Glu Val Gln Leu Leu Glu Ser Lys Thr
165 170 175

Tyr His Ala Leu Ser Asn Leu Pro Lys Ala Arg Ala Ala Leu Thr Ser
180 185 190

Ala Arg Thr Thr Ala Asn Ala Ile Tyr Cys Pro Pro Lys Leu Gln Ala
195 200 205

Thr Leu Asp Met Gln Ser Gly Ile Ile His Ala Ala Glu Glu Lys Asp
210 215 220

Trp Lys Thr Ala Tyr Ser Tyr Phe Tyr Glu Ala Phe Glu Gly Tyr Asp
225 230 235 240

Ser Ile Asp Ser Pro Lys Ala Ile Thr Ser Leu Lys Tyr Met Leu Leu
245 250 255

Cys Lys Ile Met Leu Asn Thr Pro Glu Asp Val Gln Ala Leu Val Ser
260 265 270

Gly Lys Leu Ala Leu Arg Tyr Ala Gly Arg Gln Thr Glu Ala Leu Lys
275 280 285

Cys Val Ala Gln Ala Ser Lys Asn Arg Ser Leu Ala Asp Phe Glu Lys
290 295 300

Ala Leu Thr Asp Tyr Arg Ala Glu Leu Arg Asp Asp Pro Ile Ile Ser
305 310 315 320

251

Thr His Leu Ala Lys Leu Tyr Asp Asn Leu Leu Glu Gln Asn Leu Ile
 325 330 335

Arg Val Ile Glu Pro Phe Ser Arg Val Gln Val Arg Thr Leu Trp Gly
 340 345 350

Leu His Phe Trp Pro Gly Ile Leu Thr Val Ala Thr Ser Leu Pro His
 355 360 365

Leu Ser Arg Met Gly Thr His Phe
 370 375

<210> 244

<211> 339

<212> PRT

<213> Homo sapien

<400> 244

Glu Ala Leu Gly Ser Leu Gln Pro Thr Cys Glu Ala Val Pro Leu Ser
 1 5 10 15

Pro Pro Leu Ser Pro Arg Pro Ala Glu Arg Leu Gln Leu Pro Glu Cys
 20 25 30

Ser Gly Asn Gly Ala Thr Gly Ala Thr Gly Gly Gly Thr Arg Gly Arg
 35 40 45

Ala Phe Arg Val Cys Val Ser Gly Val Gly Gly Arg Gly Arg Gly Arg
 50 55 60

Cys Glu Ser Gly Lys Met Ala Ala Ala Ala Val Val Glu Phe Gln Arg
 65 70 75 80

Ala Gln Ser Leu Leu Ser Thr Asp Arg Glu Ala Ser Ile Asp Ile Leu
 85 90 95

His Ser Ile Val Lys Arg Asp Ile Gln Glu Asn Asp Glu Glu Ala Val
 100 105 110

Gln Val Lys Glu Gln Ser Ile Leu Glu Leu Gly Ser Leu Leu Ala Lys
 115 120 125

Thr Gly Gln Ala Ala Glu Leu Gly Gly Leu Leu Lys Tyr Val Arg Pro
 130 135 140

Phe Leu Asn Ser Ile Ser Lys Ala Lys Ala Ala Arg Leu Val Arg Ser
 145 150 155 160

252

Leu Leu Asp Leu Phe Leu Asp Met Glu Ala Ala Thr Gly Gln Glu Val
 165 170 175

Glu Leu Cys Leu Glu Cys Ile Glu Trp Ala Lys Ser Glu Lys Arg Thr
 180 185 190

Phe Leu Arg Gln Ala Leu Glu Ala Arg Leu Val Ser Leu Tyr Phe Asp
 195 200 205

Thr Lys Arg Tyr Gln Glu Ala Leu His Leu Gly Ser Gln Leu Leu Arg
 210 215 220

Glu Leu Lys Lys Met Asp Asp Lys Ala Leu Leu Val Glu Val Gln Leu
 225 230 235 240

Leu Glu Ser Lys Thr Tyr His Ala Leu Ser Asn Leu Pro Lys Ala Arg
 245 250 255

Ala Ala Leu Thr Ser Ala Arg Thr Thr Ala Asn Ala Ile Tyr Cys Pro
 260 265 270

Pro Lys Leu Gln Ala Thr Leu Asp Met Gln Ser Gly Ile Ile His Ala
 275 280 285

Ala Glu Glu Lys Asp Trp Lys Thr Ala Tyr Ser Tyr Phe Tyr Glu Ala
 290 295 300

Phe Glu Gly Tyr Asp Ser Ile Asp Ser Pro Lys Ala Ile Thr Ser Leu
 305 310 315 320

Lys Tyr Met Leu Leu Cys Lys Ile Met Leu Asn Thr Pro Glu Asp Val
 325 330 335

Gln Ala Trp

<210> 245

<211> 421

<212> PRT

<213> Homo sapien

<400> 245

Met Ala Ala Ala Ala Val Val Glu Phe Gln Arg Ala Gln Ser Leu Leu
 1 5 10 15

253

Ser Thr Asp Arg Glu Ala Ser Ile Asp Ile Leu His Ser Ile Val Lys
 20 25 30

Arg Asp Ile Gln Glu Asn Asp Glu Glu Ala Val Gln Val Lys Glu Gln
 35 40 45

Ser Ile Leu Glu Leu Gly Ser Leu Leu Ala Lys Thr Gly Gln Ala Ala
 50 55 60

Glu Leu Gly Gly Leu Leu Lys Tyr Val Arg Pro Phe Leu Asn Ser Ile
 65 70 75 80

Ser Lys Ala Lys Ala Ala Arg Leu Val Arg Ser Leu Leu Asp Leu Phe
 85 90 95

Leu Asp Met Glu Ala Ala Thr Gly Gln Glu Val Glu Leu Cys Leu Glu
 100 105 110

Cys Ile Glu Trp Ala Lys Ser Glu Lys Arg Thr Phe Leu Arg Gln Ala
 115 120 125

Leu Glu Ala Arg Leu Val Ser Leu Tyr Phe Asp Thr Lys Arg Tyr Gln
 130 135 140

Glu Ala Leu His Leu Gly Ser Gln Leu Leu Arg Glu Leu Lys Lys Met
 145 150 155 160

Asp Asp Lys Ala Leu Leu Val Glu Val Gln Leu Leu Glu Ser Lys Thr
 165 170 175

Tyr His Ala Leu Ser Asn Leu Pro Lys Ala Arg Ala Ala Leu Thr Ser
 180 185 190

Ala Arg Thr Thr Ala Asn Ala Ile Tyr Cys Pro Pro Lys Leu Gln Ala
 195 200 205

Thr Leu Asp Met Gln Ser Gly Ile Ile His Ala Ala Glu Glu Lys Asp
 210 215 220

Trp Lys Thr Ala Tyr Ser Tyr Phe Tyr Glu Ala Phe Glu Gly Tyr Asp
 225 230 235 240

Ser Ile Asp Ser Pro Lys Ala Ile Thr Ser Leu Lys Tyr Met Leu Leu
 245 250 255

Cys Lys Ile Met Leu Asn Thr Pro Glu Asp Val Gln Ala Trp Gly Ala

254

260	265	270
Gly Ser Leu His Phe Arg Cys Arg Glu Glu Thr Glu Ala Leu Lys Cys 275 280 285		
Val Ala Gln Ala Ser Lys Asn Arg Ser Leu Ala Asp Phe Glu Lys Ala 290 295 300		
Leu Thr Asp Tyr Arg Ala Glu Leu Arg Asp Asp Pro Ile Ile Ser Thr 305 310 315 320		
His Leu Ala Lys Leu Tyr Asp Asn Leu Leu Glu Gln Asn Leu Ile Arg 325 330 335		
Val Ile Glu Pro Phe Ser Arg Val Gln Ile Glu His Ile Ser Ser Leu 340 345 350		
Ile Lys Leu Ser Lys Ala Asp Val Glu Arg Lys Leu Ser Gln Met Ile 355 360 365		
Leu Asp Lys Lys Phe His Gly Ile Leu Asp Gln Gly Glu Gly Val Leu 370 375 380		
Ile Ile Phe Asp Glu Pro Pro Val Asp Lys Thr Tyr Glu Ala Ala Leu 385 390 395 400		
Glu Thr Ile Gln Asn Met Ser Lys Val Val Asp Ser Leu Tyr Asn Lys 405 410 415		
Ala Lys Lys Leu Thr 420		
 <210> 246 <211> 361 <212> PRT <213> Homo sapien <400> 246		
Tyr Gly Ser Ser Tyr Arg Ala Gly Gly His Leu Ile Leu Trp Val Cys 1 5 10 15		
Ser Met Leu Cys Phe Val Ser Gly Asp Cys Gln Trp Ser Leu Glu Ser 20 25 30		
Ser Leu His Gln Gly His Lys Leu Ile Leu Val Phe Glu Val Glu Leu 35 40 45		

255

Cys	Leu	Glu	Cys	Ile	Glu	Trp	Ala	Lys	Ser	Glu	Lys	Arg	Thr	Phe	Leu	50	55	60	
Arg	Gln	Ala	Leu	Glu	Ala	Arg	Leu	Val	Ser	Leu	Tyr	Phe	Asp	Thr	Lys	65	70	75	80
Arg	Tyr	Gln	Glu	Ala	Leu	His	Leu	Gly	Ser	Gln	Leu	Leu	Arg	Glu	Leu	85	90	95	
Lys	Lys	Met	Asp	Asp	Lys	Ala	Leu	Leu	Val	Glu	Val	Gln	Leu	Leu	Glu	100	105	110	
Ser	Lys	Thr	Tyr	His	Ala	Leu	Ser	Asn	Leu	Pro	Lys	Ala	Arg	Ala	Ala	115	120	125	
Leu	Thr	Ser	Ala	Arg	Thr	Thr	Ala	Asn	Ala	Ile	Tyr	Cys	Pro	Pro	Lys	130	135	140	
Leu	Gln	Ala	Thr	Leu	Asp	Met	Gln	Ser	Gly	Ile	Ile	His	Ala	Ala	Glu	145	150	155	160
Glu	Lys	Asp	Trp	Lys	Thr	Ala	Tyr	Ser	Tyr	Phe	Tyr	Glu	Ala	Phe	Glu	165	170	175	
Gly	Tyr	Asp	Ser	Ile	Asp	Ser	Pro	Lys	Ala	Ile	Thr	Ser	Leu	Lys	Tyr	180	185	190	
Met	Leu	Leu	Cys	Lys	Ile	Met	Leu	Asn	Thr	Pro	Glu	Asp	Val	Gln	Ala	195	200	205	
Leu	Val	Ser	Gly	Lys	Leu	Ala	Leu	Arg	Tyr	Ala	Gly	Arg	Gln	Thr	Glu	210	215	220	
Ala	Leu	Lys	Cys	Val	Ala	Gln	Ala	Ser	Lys	Asn	Arg	Ser	Leu	Ala	Asp	225	230	235	240
Phe	Glu	Lys	Ala	Leu	Thr	Asp	Tyr	Arg	Ala	Glu	Leu	Arg	Asp	Asp	Pro	245	250	255	
Ile	Ile	Ser	Thr	His	Leu	Ala	Lys	Leu	Tyr	Asp	Asn	Leu	Leu	Glu	Gln	260	265	270	
Asn	Leu	Ile	Arg	Val	Ile	Glu	Pro	Phe	Ser	Arg	Val	Gln	Ile	Glu	His	275	280	285	

256

Ile Ser Ser Leu Ile Lys Leu Ser Lys Ala Asp Val Glu Arg Lys Leu
 290 295 300

Ser Gln Met Ile Leu Asp Lys Lys Phe His Gly Ile Leu Asp Gln Gly
 305 310 315 320

Glu Gly Val Leu Ile Ile Phe Asp Glu Pro Pro Val Asp Lys Thr Tyr
 325 330 335

Glu Ala Ala Leu Glu Thr Ile Gln Asn Met Ser Lys Val Val Asp Ser
 340 345 350

Leu Tyr Asn Lys Ala Lys Lys Leu Thr
 355 360

<210> 247

<211> 460

<212> PRT

<213> Homo sapien

<400> 247

Met Ala Ala Ala Ala Val Val Glu Phe Gln Arg Ala Gln Ser Leu Leu
 1 5 10 15

Ser Thr Asp Arg Glu Ala Ser Ile Asp Ile Leu His Ser Ile Val Lys
 20 25 30

Arg Asp Ile Gln Glu Asn Asp Glu Glu Ala Val Gln Val Lys Glu Gln
 35 40 45

Ser Ile Leu Glu Leu Gly Ser Leu Leu Ala Lys Thr Gly Gln Ala Ala
 50 55 60

Glu Leu Gly Gly Leu Leu Lys Tyr Val Arg Pro Phe Leu Asn Ser Ile
 65 70 75 80

Ser Lys Ala Lys Ala Ala Arg Leu Val Arg Ser Leu Leu Asp Leu Phe
 85 90 95

Leu Asp Met Glu Ala Ala Thr Gly Gln Glu Tyr Arg His Leu Ile Leu
 100 105 110

Trp Val Cys Ser Met Leu Cys Phe Val Ser Gly Asp Cys Gln Trp Ser
 115 120 125

Leu Glu Ser Ser Leu His Gln Gly His Lys Leu Ile Leu Val Phe Glu
 130 135 140

257

Val	Glu	Leu	Cys	Leu	Glu	Cys	Ile	Glu	Trp	Ala	Lys	Ser	Glu	Lys	Arg	
145					150					155					160	
Thr	Phe	Leu	Arg	Gln	Ala	Leu	Glu	Ala	Arg	Leu	Val	Ser	Leu	Tyr	Phe	
				165					170					175		
Asp	Thr	Lys	Arg	Tyr	Gln	Glu	Ala	Leu	His	Leu	Gly	Ser	Gln	Leu	Leu	
			180					185					190			
Arg	Glu	Leu	Lys	Lys	Met	Asp	Asp	Lys	Ala	Leu	Leu	Val	Glu	Val	Gln	
		195					200					205				
Leu	Leu	Glu	Ser	Lys	Thr	Tyr	His	Ala	Leu	Ser	Asn	Leu	Pro	Lys	Ala	
	210					215					220					
Arg	Ala	Ala	Leu	Thr	Ser	Ala	Arg	Thr	Thr	Ala	Asn	Ala	Ile	Tyr	Cys	
225					230					235					240	
Pro	Pro	Lys	Leu	Gln	Ala	Thr	Leu	Asp	Met	Gln	Ser	Gly	Ile	Ile	His	
				245					250					255		
Ala	Ala	Glu	Glu	Lys	Asp	Trp	Lys	Thr	Ala	Tyr	Ser	Tyr	Phe	Tyr	Glu	
			260					265					270			
Ala	Phe	Glu	Gly	Tyr	Asp	Ser	Ile	Asp	Ser	Pro	Lys	Ala	Ile	Thr	Ser	
		275					280					285				
Leu	Lys	Tyr	Met	Leu	Leu	Cys	Lys	Ile	Met	Leu	Asn	Thr	Pro	Glu	Asp	
	290					295					300					
Val	Gln	Ala	Leu	Val	Ser	Gly	Lys	Leu	Ala	Leu	Arg	Tyr	Ala	Gly	Arg	
305					310					315				320		
Gln	Thr	Glu	Ala	Leu	Lys	Cys	Val	Ala	Gln	Ala	Ser	Lys	Asn	Arg	Ser	
				325					330					335		
Leu	Ala	Asp	Phe	Glu	Lys	Ala	Leu	Thr	Asp	Tyr	Arg	Ala	Glu	Leu	Arg	
			340					345					350			
Asp	Asp	Pro	Ile	Ile	Ser	Thr	His	Leu	Ala	Lys	Leu	Tyr	Asp	Asn	Leu	
		355					360					365				
Leu	Glu	Gln	Asn	Leu	Ile	Arg	Val	Ile	Glu	Pro	Phe	Ser	Arg	Val	Gln	
	370					375					380					

258

Ile Glu His Ile Ser Ser Leu Ile Lys Leu Ser Lys Ala Asp Val Glu
385 390 395 400

Arg Lys Leu Ser Gln Met Ile Leu Asp Lys Lys Phe His Gly Ile Leu
405 410 415

Asp Gln Gly Glu Gly Val Leu Ile Ile Phe Asp Glu Pro Pro Val Asp
420 425 430

Lys Thr Tyr Glu Ala Ala Leu Glu Thr Ile Gln Asn Met Ser Lys Val
435 440 445

Val Asp Ser Leu Tyr Asn Lys Ala Lys Lys Leu Thr
450 455 460

<210> 248

<211> 324

<212> PRT

<213> Homo sapien

<400> 248

Met Glu Ala Ala Thr Gly Gln Glu Val Glu Leu Cys Leu Glu Cys Ile
1 5 10 15

Glu Trp Ala Lys Ser Glu Lys Arg Thr Phe Leu Arg Gln Ala Leu Glu
20 25 30

Ala Arg Leu Val Ser Leu Tyr Phe Asp Thr Lys Arg Tyr Gln Glu Ala
35 40 45

Leu His Leu Gly Ser Gln Leu Leu Arg Glu Leu Lys Lys Met Asp Asp
50 55 60

Lys Ala Leu Leu Val Glu Val Gln Leu Leu Glu Ser Lys Thr Tyr His
65 70 75 80

Ala Leu Ser Asn Leu Pro Lys Ala Arg Ala Ala Leu Thr Ser Ala Arg
85 90 95

Thr Thr Ala Asn Ala Ile Tyr Cys Pro Pro Lys Leu Gln Ala Thr Leu
100 105 110

Asp Met Gln Ser Gly Ile Ile His Ala Ala Glu Glu Lys Asp Trp Lys
115 120 125

Thr Ala Tyr Ser Tyr Phe Tyr Glu Ala Phe Glu Gly Tyr Asp Ser Ile

259

130	135	140
Asp Ser Pro Lys Ala Ile Thr Ser Leu Lys Tyr Met Leu Leu Cys Lys		
145	150	155 160
Ile Met Leu Asn Thr Pro Glu Asp Val Gln Ala Leu Val Ser Gly Lys		
	165	170 175
Leu Ala Leu Arg Tyr Ala Gly Arg Gln Thr Glu Ala Leu Lys Cys Val		
	180	185 190
Ala Gln Ala Ser Lys Asn Arg Ser Leu Ala Asp Phe Glu Lys Ala Leu		
	195	200 205
Thr Asp Tyr Arg Ala Glu Leu Arg Asp Asp Pro Ile Ile Ser Thr His		
	210	215 220
Leu Ala Lys Leu Tyr Asp Asn Leu Leu Glu Gln Asn Leu Ile Arg Val		
	225	230 235 240
Ile Glu Pro Phe Ser Arg Val Gln Ile Glu His Ile Ser Ser Leu Ile		
	245	250 255
Lys Leu Ser Lys Ala Asp Val Glu Arg Lys Leu Ser Gln Met Ile Leu		
	260	265 270
Asp Lys Lys Phe His Gly Ile Leu Asp Gln Gly Glu Gly Val Leu Ile		
	275	280 285
Ile Phe Asp Glu Pro Pro Val Asp Lys Thr Tyr Glu Ala Ala Leu Glu		
	290	295 300
Thr Ile Gln Asn Met Ser Lys Val Val Asp Ser Leu Tyr Asn Lys Ala		
	305	310 315 320
Lys Lys Leu Thr		
<210> 249		
<211> 263		
<212> PRT		
<213> Homo sapien		
<400> 249		
Met Asp Asp Lys Ala Leu Leu Val Glu Val Gln Leu Leu Glu Ser Lys		
1	5	10 15

260

Thr Tyr His Ala Leu Ser Asn Leu Pro Lys Ala Arg Ala Ala Leu Thr
 20 25 30

Ser Ala Arg Thr Thr Ala Asn Ala Ile Tyr Cys Pro Pro Lys Leu Gln
 35 40 45

Ala Thr Leu Asp Met Gln Ser Gly Ile Ile His Ala Ala Glu Glu Lys
 50 55 60

Asp Trp Lys Thr Ala Tyr Ser Tyr Phe Tyr Glu Ala Phe Glu Gly Tyr
 65 70 75 80

Asp Ser Ile Asp Ser Pro Lys Ala Ile Thr Ser Leu Lys Tyr Met Leu
 85 90 95

Leu Cys Lys Ile Met Leu Asn Thr Pro Glu Asp Val Gln Ala Leu Val
 100 105 110

Ser Gly Lys Leu Ala Leu Arg Tyr Ala Gly Arg Gln Thr Glu Ala Leu
 115 120 125

Lys Cys Val Ala Gln Ala Ser Lys Asn Arg Ser Leu Ala Asp Phe Glu
 130 135 140

Lys Ala Leu Thr Asp Tyr Arg Ala Glu Leu Arg Asp Asp Pro Ile Ile
 145 150 155 160

Ser Thr His Leu Ala Lys Leu Tyr Asp Asn Leu Leu Glu Gln Asn Leu
 165 170 175

Ile Arg Val Ile Glu Pro Phe Ser Arg Val Gln Ile Glu His Ile Ser
 180 185 190

Ser Leu Ile Lys Leu Ser Lys Ala Asp Val Glu Arg Lys Leu Ser Gln
 195 200 205

Met Ile Leu Asp Lys Lys Phe His Gly Ile Leu Asp Gln Gly Glu Gly
 210 215 220

Val Leu Ile Ile Phe Asp Glu Pro Pro Val Asp Lys Thr Tyr Glu Ala
 225 230 235 240

Ala Leu Glu Thr Ile Gln Asn Met Ser Lys Val Val Asp Ser Leu Tyr
 245 250 255

261

Asn Lys Ala Lys Lys Leu Thr
260

<210> 250

<211> 215

<212> PRT

<213> Homo sapien

<400> 250

Met His Val Asp Met Gln Ser Gly Ile Ile His Ala Ala Glu Glu Lys
1 5 10 15

Asp Trp Lys Thr Ala Tyr Ser Tyr Phe Tyr Glu Ala Phe Glu Gly Tyr
20 25 30

Asp Ser Ile Asp Ser Pro Lys Ala Ile Thr Ser Leu Lys Tyr Met Leu
35 40 45

Leu Cys Lys Ile Met Leu Asn Thr Pro Glu Asp Val Gln Ala Leu Val
50 55 60

Ser Gly Lys Leu Ala Leu Arg Tyr Ala Gly Arg Gln Thr Glu Ala Leu
65 70 75 80

Lys Cys Val Ala Gln Ala Ser Lys Asn Arg Ser Leu Ala Asp Phe Glu
85 90 95

Lys Ala Leu Thr Asp Tyr Arg Ala Glu Leu Arg Asp Asp Pro Ile Ile
100 105 110

Ser Thr His Leu Ala Lys Leu Tyr Asp Asn Leu Leu Glu Gln Asn Leu
115 120 125

Ile Arg Val Ile Glu Pro Phe Ser Arg Val Gln Ile Glu His Ile Ser
130 135 140

Ser Leu Ile Lys Leu Ser Lys Ala Asp Val Glu Arg Lys Leu Ser Gln
145 150 155 160

Met Ile Leu Asp Lys Lys Phe His Gly Ile Leu Asp Gln Gly Glu Gly
165 170 175

Val Leu Ile Ile Phe Asp Glu Pro Pro Val Asp Lys Thr Tyr Glu Ala
180 185 190

Ala Leu Glu Thr Ile Gln Asn Met Ser Lys Val Val Asp Ser Leu Tyr
195 200 205

262

Asn Lys Ala Lys Lys Leu Thr
 210 215

<210> 251
 <211> 161
 <212> PRT
 <213> Homo sapien

<400> 251

Met Cys Pro Glu Asp Val Gln Ala Leu Val Ser Gly Lys Leu Ala Leu
 1 5 10 15

Arg Tyr Ala Gly Arg Gln Thr Glu Ala Leu Lys Cys Val Ala Gln Ala
 20 25 30

Ser Lys Asn Arg Ser Leu Ala Asp Phe Glu Lys Ala Leu Thr Asp Tyr
 35 40 45

Arg Ala Glu Leu Arg Asp Asp Pro Ile Ile Ser Thr His Leu Ala Lys
 50 55 60

Leu Tyr Asp Asn Leu Leu Glu Gln Asn Leu Ile Arg Val Ile Glu Pro
 65 70 75 80

Phe Ser Arg Val Gln Ile Glu His Ile Ser Ser Leu Ile Lys Leu Ser
 85 90 95

Lys Ala Asp Val Glu Arg Lys Leu Ser Gln Met Ile Leu Asp Lys Lys
 100 105 110

Phe His Gly Ile Leu Asp Gln Gly Glu Gly Val Leu Ile Ile Phe Asp
 115 120 125

Glu Pro Pro Val Asp Lys Thr Tyr Glu Ala Ala Leu Glu Thr Ile Gln
 130 135 140

Asn Met Ser Lys Val Val Asp Ser Leu Tyr Asn Lys Ala Lys Lys Leu
 145 150 155 160

Thr

<210> 252
 <211> 149
 <212> PRT
 <213> Homo sapien

263

<220>
 <221> MISC_FEATURE
 <222> (6)..(6)
 <223> X=any amino acid

<220>
 <221> MISC_FEATURE
 <222> (8)..(8)
 <223> X=any amino acid

<220>
 <221> MISC_FEATURE
 <222> (10)..(10)
 <223> X=any amino acid

<400> 252

Ala Gly Thr Cys Leu Xaa Leu Xaa Glu Xaa Thr Glu Ala Leu Lys Cys
 1 5 10 15

Val Ala Gln Ala Ser Lys Asn Arg Ser Leu Ala Asp Phe Glu Lys Ala
 20 25 30

Leu Thr Asp Tyr Arg Ala Glu Leu Arg Asp Asp Pro Ile Ile Ser Thr
 35 40 45

His Leu Ala Lys Leu Tyr Asp Asn Leu Leu Glu Gln Asn Leu Ile Arg
 50 55 60

Val Ile Glu Pro Phe Ser Arg Val Gln Ile Glu His Ile Ser Ser Leu
 65 70 75 80

Ile Lys Leu Ser Lys Ala Asp Val Glu Arg Lys Leu Ser Gln Met Ile
 85 90 95

Leu Asp Lys Lys Phe His Gly Ile Leu Asp Gln Gly Glu Gly Val Leu
 100 105 110

Ile Ile Phe Asp Glu Pro Pro Val Asp Lys Thr Tyr Glu Ala Ala Leu
 115 120 125

Glu Thr Ile Gln Asn Met Ser Lys Val Val Asp Ser Leu Tyr Asn Lys
 130 135 140

Ala Lys Lys Leu Thr
 145

264

<210> 253
 <211> 166
 <212> PRT
 <213> Homo sapien

<400> 253

Met Leu Val Cys Arg Ile Ala Pro Arg Arg Cys Pro Gly Leu Val Ser
 1 5 10 15

Gly Lys Leu Ala Leu Pro Tyr Ala Gly Arg Gln Thr Glu Ala Leu Lys
 20 25 30

Cys Val Ala Gln Ala Ser Lys Asn Arg Ser Leu Ala Asp Phe Glu Lys
 35 40 45

Ala Leu Thr Asp Tyr Arg Ala Glu Leu Arg Asp Asp Pro Ile Ile Ser
 50 55 60

Thr His Leu Ala Lys Leu Tyr Asp Asn Leu Leu Glu Gln Asn Leu Ile
 65 70 75 80

Arg Val Ile Glu Pro Phe Ser Arg Val Gln Ile Glu His Ile Ser Ser
 85 90 95

Leu Ile Lys Leu Ser Lys Ala Asp Val Glu Arg Lys Leu Ser Gln Met
 100 105 110

Ile Leu Asp Lys Lys Phe His Gly Ile Leu Asp Gln Gly Glu Gly Val
 115 120 125

Leu Ile Ile Phe Asp Glu Pro Pro Val Asp Lys Thr Tyr Glu Ala Ala
 130 135 140

Leu Glu Thr Ile Gln Asn Met Ser Lys Val Val Asp Ser Leu Tyr Asn
 145 150 155 160

Lys Ala Lys Lys Leu Thr
 165